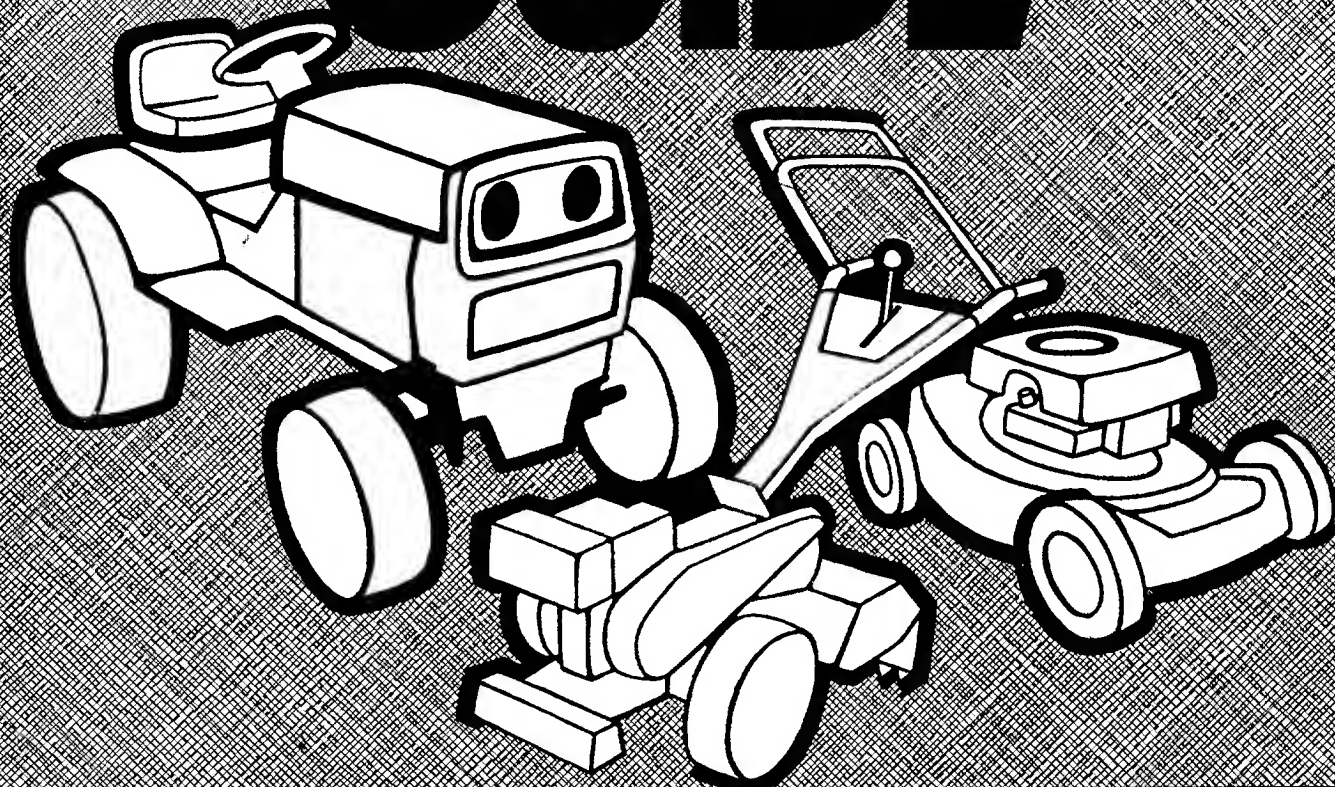


OWNER'S GUIDE



ASSEMBLY • OPERATION • MAINTENANCE • PARTS

38" RIDING MOWER

Important:

**Read Safety Rules and
Instructions Carefully**

Thank you for purchasing an
American built product.

Model Number

131-497A

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LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



WARNING

TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.



WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—**READ THIS OWNER'S MANUAL.**
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. Do not carry passengers.
6. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury.
7. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
8. Stop the blade(s) when crossing gravel drives, walks or roads.
9. Disengage all attachment clutches and shift into neutral before attempting to start engine.
10. Disengage power to attachment(s) and stop engine before leaving operating position.
11. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
12. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
13. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
14. Disengage power to attachment(s) when transporting or not in use.
15. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
16. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
17. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
18. Stay alert for holes in terrain and other hidden hazards.
19. Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
20. Watch out for traffic when crossing or near roadways.
21. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
22. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
23. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
24. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
25. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
26. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
27. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
28. Do not change the engine governor settings or overspeed the engine.
29. When using the vehicle with mower, proceed as follows:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
 - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
 - (4) Check blade mounting bolts for proper tightness at frequent intervals.
30. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
31. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up.

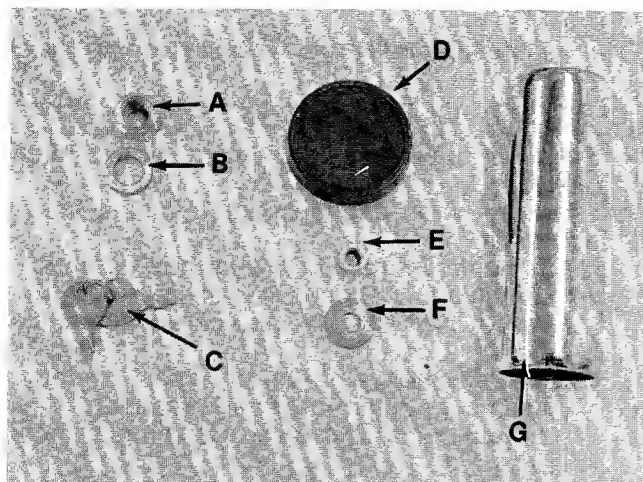


FIGURE 1.

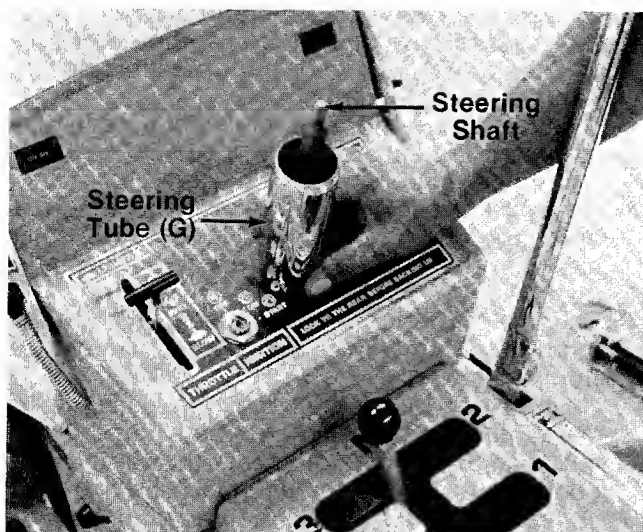


FIGURE 2.

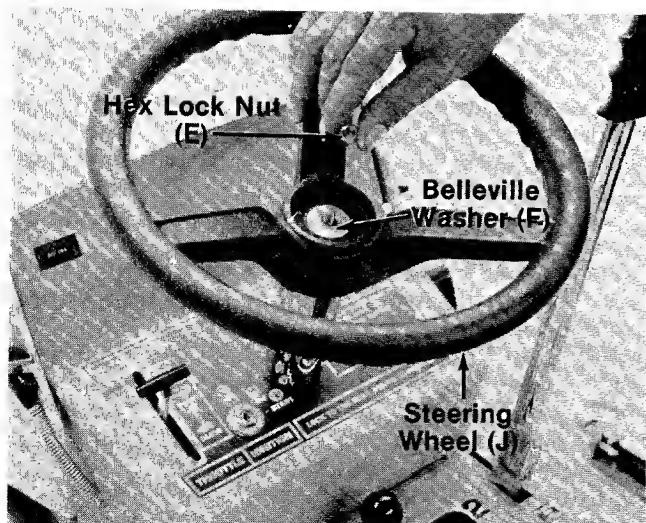


FIGURE 3.

ASSEMBLY



This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

← Contents of Hardware Pack: (See figure 1)

- A (1) Hex Nut 1/2-13 Thread
- B (1) Lock Washer 1/2" I.D.
- C (2) Ignition Keys
- D (1) Steering Wheel Cap
- E (1) Hex Lock Nut 5/16-24 Thread
- F (1) Belleville Washer
- G (1) Steering Tube
- H (1) Rubber Band (Not Shown)

Loose Parts in Carton:

- I (1) Battery Pack (Not Shown)
- J (1) Steering Wheel (Not Shown)
- K (1) Seat (Not Shown)



Reference to right hand or left hand side of machine is from the driver's seat facing forward.

- ← 1. Place the steering tube (G) over the steering shaft. See figure 2.

- ← 2. Place the steering wheel (J) over steering shaft and steering tube. See figure 3.
3. Secure steering wheel with belleville washer (F) (cup side down) and hex lock nut (E). See figure 3. A 1/2" wrench is required.

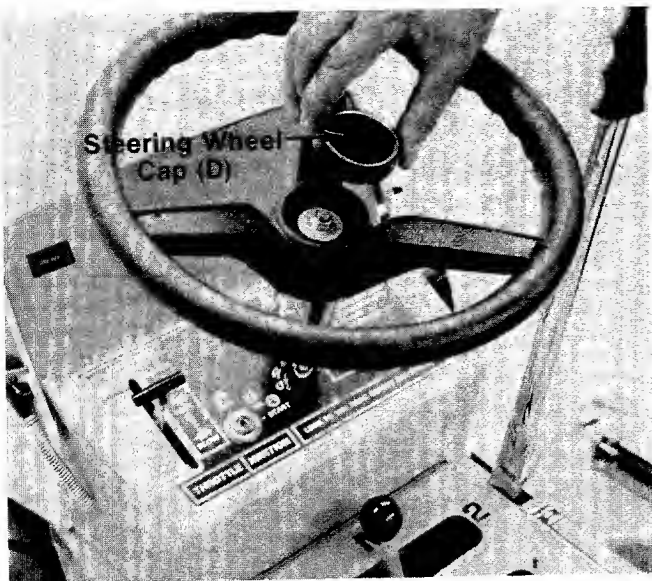


FIGURE 4.

BATTERY INFORMATION



WARNING

- A. Battery acid must be handled with great care as it will blister the skin and damage clothing. It is advisable to wear goggles, rubber gloves, and a protective apron when working with it.
- B. If for any reason acid should be spattered in the eyes, wash it out immediately with clean cold water. Seek medical aid if discomfort continues.
- C. If acid gets on clothes, dilute it with clean water first, then neutralize with dilute ammonia water or a water solution of baking soda.
- D. Since battery acid is corrosive to metals, do not pour into any sink or drain. Rinse empty

electrolyte containers and mutilate before discarding.

- E. Keep sparks, flame, cigarettes away.
- F. Hydrogen gas is generated during charging and discharging.
- G. Ventilate when charging or using in enclosed space.
- H. When using a charger—to avoid sparks, NEVER connect or disconnect charger clips to battery while charger is turned on.
- I. Always shield eyes and protect skin and clothing when working near batteries.



DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

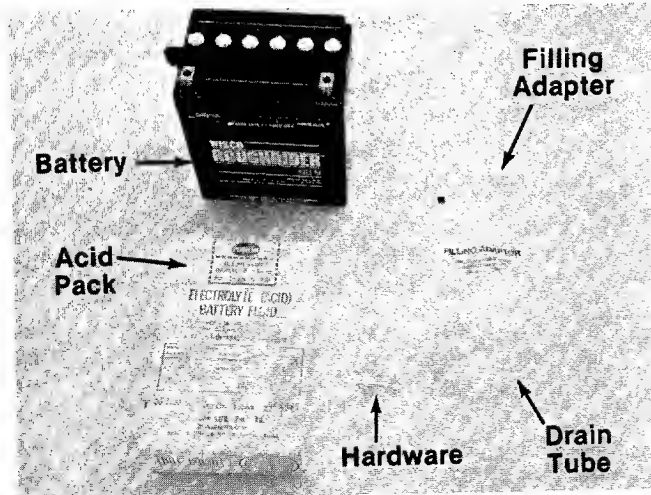


FIGURE 5.

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware. See figure 5



DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).



FIGURE 6.

2. Place the battery on table or workbench to be filled.
3. Place one end of clear plastic drain tube on manifold of battery. See figure 6.

NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

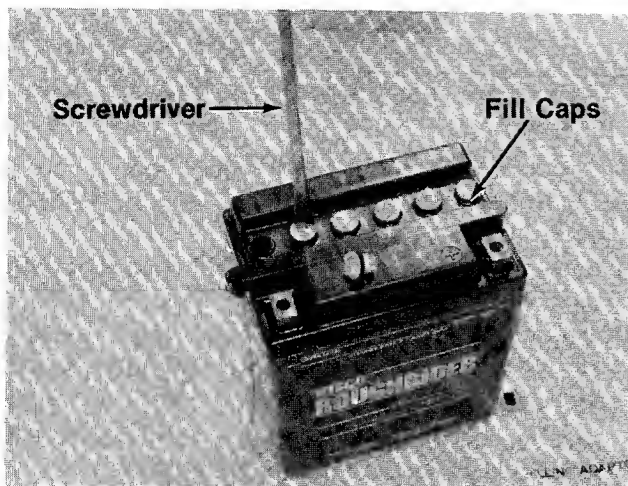


FIGURE 7.

4. Remove the six fill caps from the top of the battery. A screwdriver will make it easier. See figure 7.

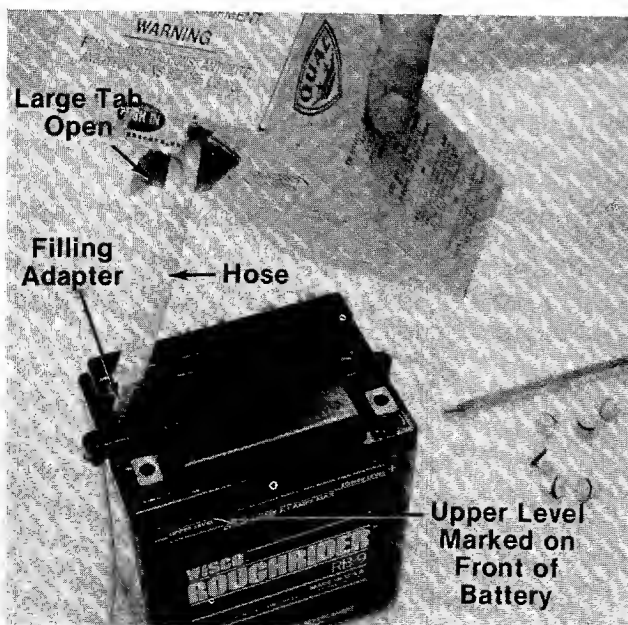


FIGURE 8.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use a sharp tool or object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 8.
7. Fill each cell to upper level marked on front of battery. Reassemble fill caps to battery. See figure 8.



WARNING

POISON/DANGER CAUSES SEVERE BURNS

Contains sulfuric acid. Avoid contact with skin, eyes or clothing. Antidote: **EXTERNAL**—Flush with water. **INTERNAL**—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or veg. oil. Call physician immediately. Eyes: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes away. Ventilate when charging or using in enclosed space.

Always shield eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN

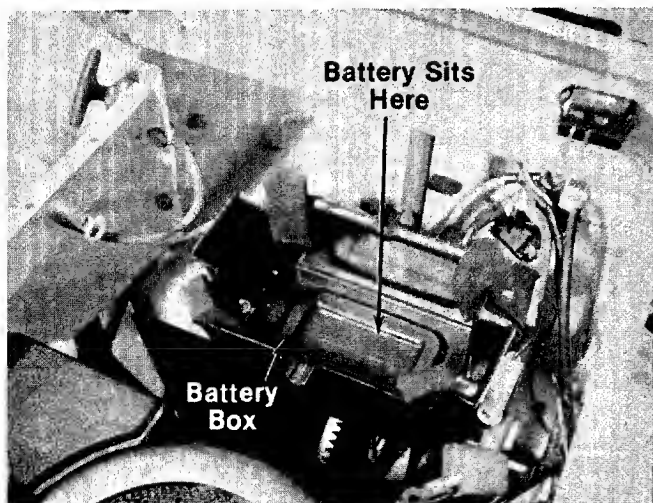


FIGURE 9.

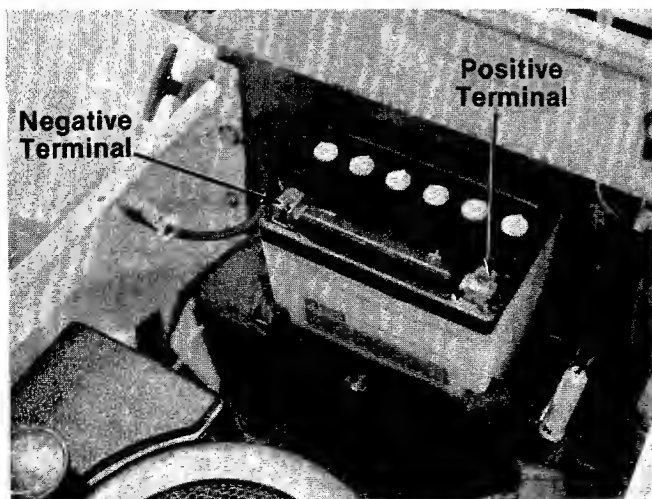


FIGURE 10.

8. Allow battery to sit for 20 minutes to 1/2 hour. Add additional acid if necessary to bring it up to the proper level.
9. The battery can be charged after the 20 minutes sitting period. The battery can be **SLOW CHARGED (DO NOT FAST CHARGE)** at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE

Charging rate after battery has been put into operation: The battery is to be charged with the charger provided for a period of 14-16 hours. **NO LONGER THAN 30 HOURS.**

CAUTION

After battery has been in service, add only distilled water. **DO NOT ADD ACID.**

10. Open the hood of the lawn tractor. Figure 9 shows the battery box in which the battery will be mounted.

11. Place the battery in the rider so that the positive terminal is towards the left side of the unit. See figure 10.

NOTE

Right and left hand side of the unit is determined by sitting on the seat in the operating position, facing forward.

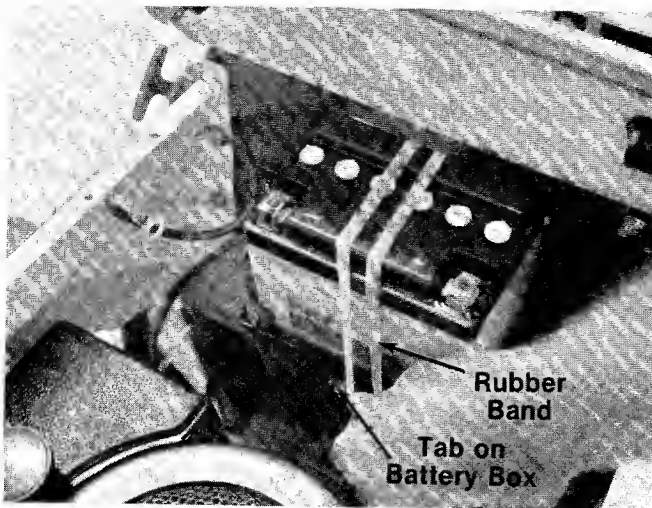


FIGURE 11.

12. Secure the battery to the battery box by stretching the rubber band (H) provided across the battery. Loop each end around the tab on the sides of the battery box. See figure 11.

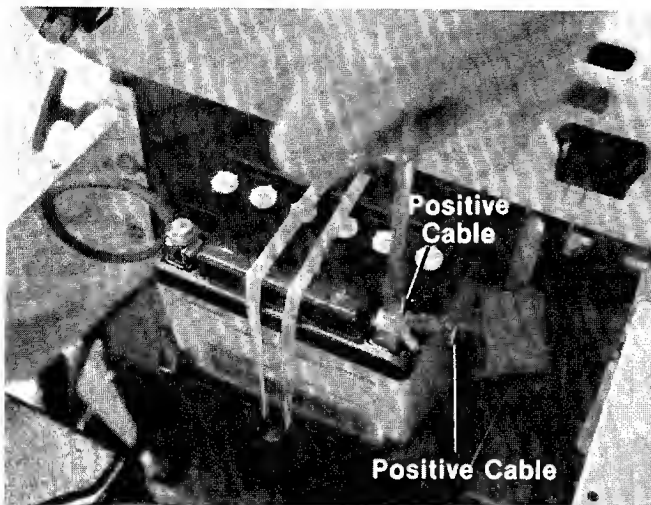


FIGURE 12.

13. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Slide back the rubber boot which is on the positive cable. Place the positive (heavy red wire) cable and the small red wire (with a fuse holder in it) on the positive terminal. Secure with screw and lock washer provided. See figure 12.
14. Slide the square nut (provided with battery hardware) into the negative (-) terminal. Place the negative (heavy red wire) cable on the negative terminal. Secure with screw and lock washer provided.

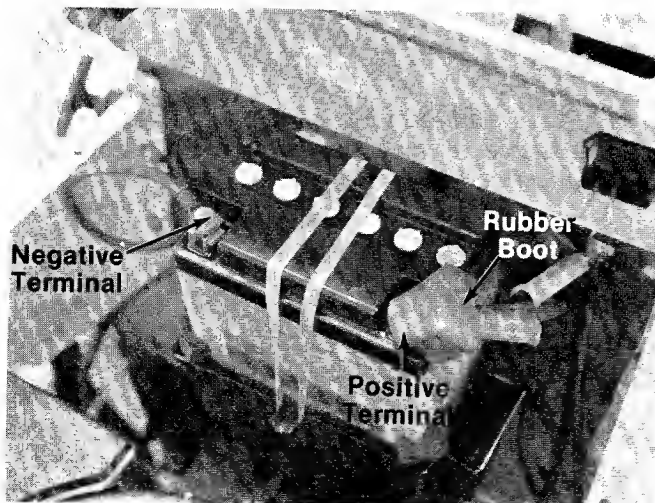


FIGURE 13.

15. Slide the rubber boot over the positive terminal. See figure 13.
16. Run the drain tube behind the battery to the left hand side of the tractor. Feed the end of the battery drain tube into the convoluted tube already installed in tractor.

CONTROLS

- a. **Throttle Control.** The throttle control is used to regulate the engine speed and choke the engine. The engine should be operated from $\frac{3}{4}$ to full throttle when operating the cutting deck or snow thrower (optional). See figure 14.

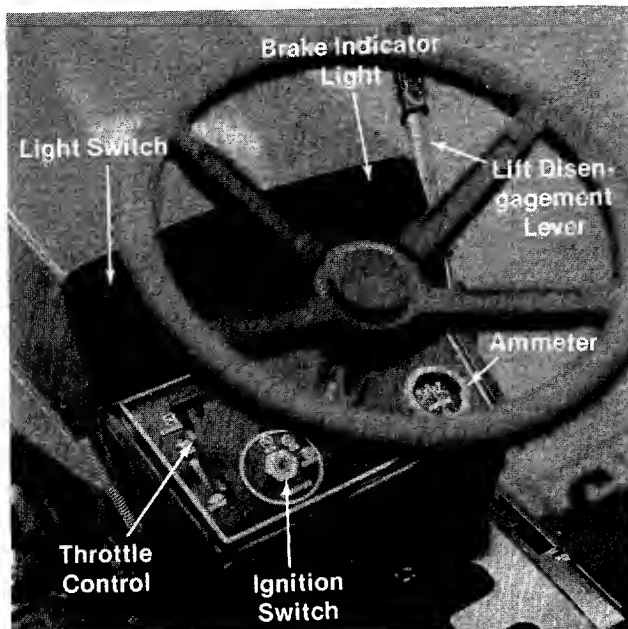


FIGURE 14.

- b. **Gear Shift Lever.** The gear shift lever is used to shift into one of three Forward Gears, "NEUTRAL" or "REVERSE." See figure 14.
- c. **Lift and Disengagement Lever.** It is used to raise the cutting deck. Pulling it all the way back and locking it disengages the blades. The engine will not start unless the lift and disengagement lever is in the disengaged position. See figure 14.
- d. **Ignition Switch.** See figure 14. Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting.
- e. **Light Switch.** Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 14.
- f. **Brake Indicator Light.** The brake indicator light is located on the dash panel. Whenever the starter key is on and the brake pedal is depressed, it will illuminate. See figure 14.



CAUTION

This light indicates that the brake is engaged. Operating the unit with the brake engaged will result in rapid brake wear and premature brake failure.

- g. **Ammeter.** The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus side (+) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 14.
- h. **Brake.** The brake pedal is located on the right hand side of the mower and is operated by depressing it with your right foot. See figure 15.

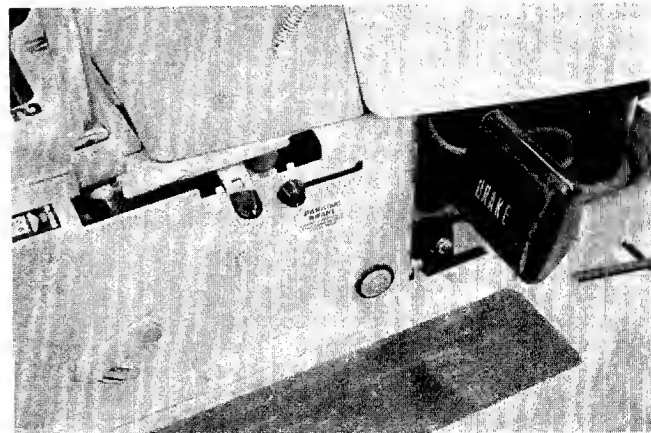


FIGURE 15.

- i. **Brake Lock.** The brake lock is located on the right hand side of the mower. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 16.

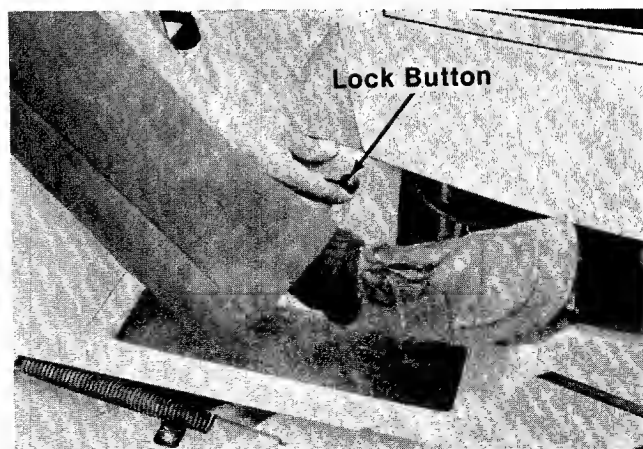


FIGURE 16.

- j. **Clutch Pedal.** The clutch pedal is used to disengage the drive mechanism. Depressing the clutch pedal at any time will reduce mower speed. See figure 17.

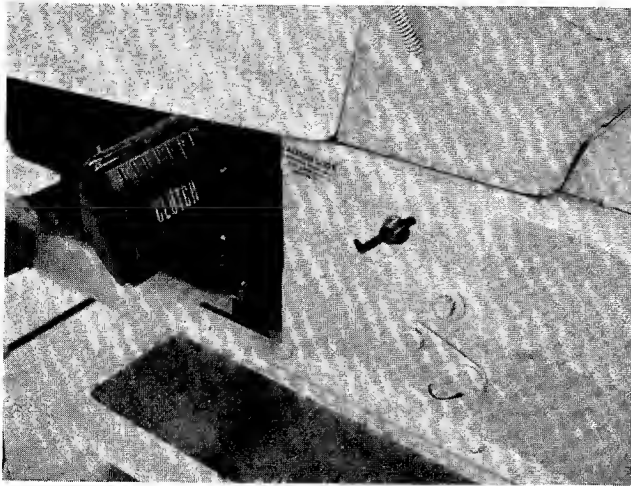


FIGURE 17.

- k. **Clutch Lockout.** When the clutch pedal is depressed all the way, it can be locked by placing the clutch lockout in the "START" position as shown in figure 18. The clutch lockout must be in this position before the engine will start.



NOTE

The engine will not start unless the clutch lockout is in the "START" position and the lift lever is in the DISENGAGED position.

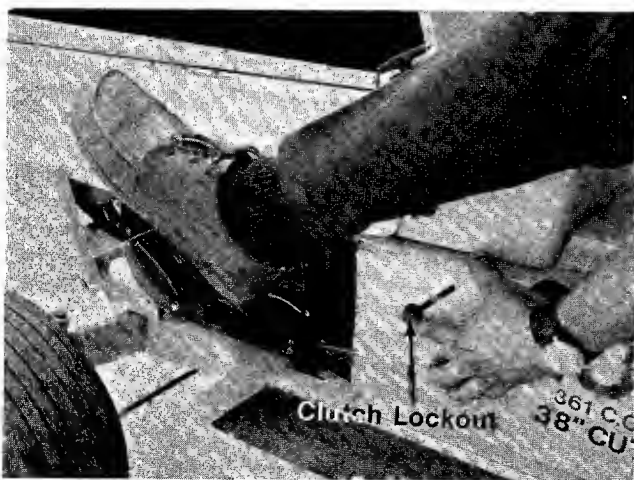


FIGURE 18.

- i. **Cutting Controls.** The cutting controls consist of the height of cut stop and the wheel height adjusters.

Height of Cut Stop. See figure 19. Lift the stop and set it at the desired cutting height.

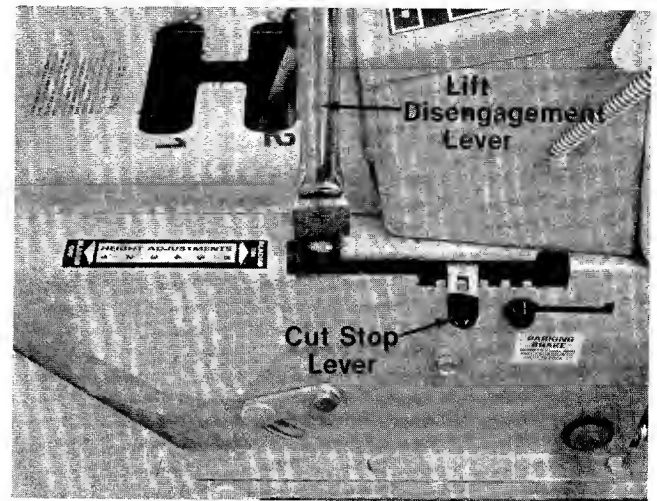


FIGURE 19.

Wheel Height Adjuster. See figure 20. Move the lever towards the wheel and set it in the desired cutting height.

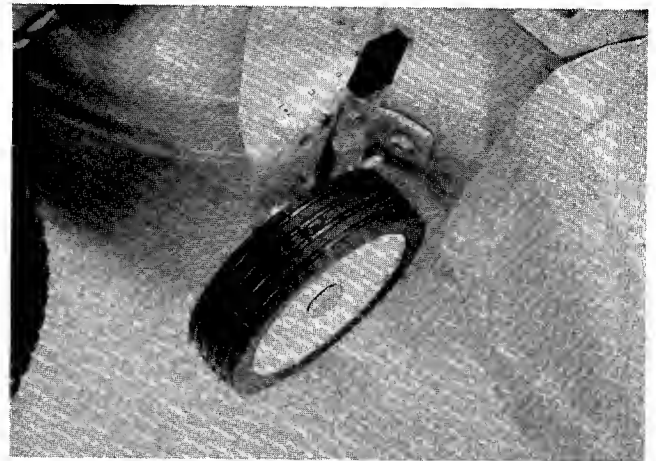


FIGURE 20.

The cutting height of the mower can be set in two different ways: **FULL FLOAT** position where the deck follows the contour of the ground, and the **SUSPENDED** position where the deck hangs from the frame of the rider. The suspended position is normally used for cutting rough uneven ground.

To set the cutting deck in the full float position, set the wheel height adjusters in the desired cutting height as indicated in figure 20. Set height of cut stop all the way forward.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.



CAUTION

Parking brake **MUST** be disengaged before unit is put into motion.



NOTE

Unit is equipped with separate brake and clutch pedals. It is necessary to disengage clutch when applying brakes to stop efficiently.

OPERATION



CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
 - a. Shift transmission to neutral
 - b. Set parking brake
 - c. Disengage attachment clutch
 - d. Shut off engine
 - e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

TIRE PRESSURE

FOR SHIPPING PURPOSES, THE TIRES ON YOUR UNIT MAY BE OVER-INFLATED. TIRE PRESSURE SHOULD BE REDUCED BEFORE UNIT IS PUT INTO OPERATION. PRESSURE SHOULD BE APPROXIMATELY 15 P.S.I. EQUAL TIRE PRESSURE SHOULD BE MAINTAINED ON ALL TIRES. MAXIMUM TIRE PRESSURE IS 30 P.S.I.



CAUTION

Installation of tire to rim:

1. Lubricate tire beads and rim flanges.
2. Do not exceed 30 P.S.I. when seating beads.
3. Adjust to recommended pressure after beads are sealed.

STARTING THE ENGINE

Be sure to follow the instructions for the oil and gasoline as described in the engine manual.

1. Be sure the fuel shut-off valve is open (must be turned counterclockwise). See figure 21.

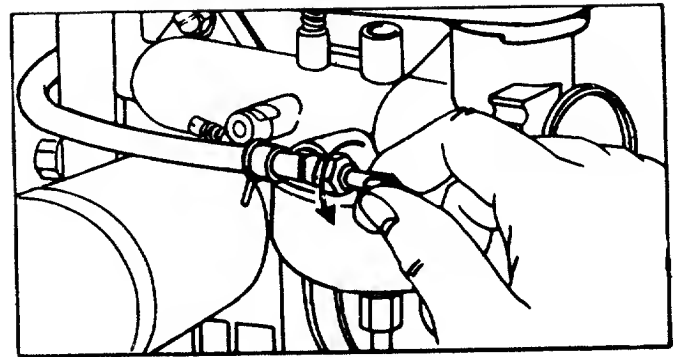


FIGURE 21. FUEL SHUT-OFF VALVE

2. Place the clutch lockout in the "START" position. See figure 18.
3. Place the lift and disengagement lever in the **DISENGAGED** position. See figure 14.



NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch pedal is depressed and the lift and disengagement lever is in the disengaged position.



WARNING

Do not operate the rider if the interlock system is malfunctioning because it is a safety device, designed for protection.

4. Set the throttle control in the **CHOKE** position. See figure 14.
5. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figure 14.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position and remove the key to prevent accidental starting.



NOTE

A brief break-in period is essential to ensure maximum engine and mower life. This consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 2 hours of operation.



IMPORTANT

After striking a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine.
3. Move throttle control to desired engine speed.
4. Depress the clutch pedal and shift into first gear or reverse.
5. Release clutch pedal slowly to put unit into motion.
6. Depress the clutch pedal when shifting gears.



NOTE

Do **not** force the gear shift lever!

7. The mower is brought to a stop by depressing the brake and clutch pedals. The drive belt will be disengaged and the brake will be applied.



CAUTION

If the mower is not to be used for a long period, place the gear shift lever in NEUTRAL and stop the engine. DO NOT leave the machine on an incline.

OPERATING THE CUTTER BLADE

The cutting blades may be engaged while the mower is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.



WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening and from the blade.

To stop the blades, move the lift and disengagement lever (figure 19) into the DISENGAGED position. This raises the deck and disengages the blades.



NOTE

When the machine is used for other than mowing operations the blade drive should be disengaged.

GRASS CATCHER Model No. 191-015A is available as optional equipment for the mower shown in this manual.



WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.



NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

ADJUSTMENTS

SEAT ADJUSTMENT

The seat may be adjusted in one of four hole locations. Remove hex nut and lock washer from under seat spring.

After desired seat location is selected, secure seat to seat spring with lock washer and hex nut. A 3/4" or adjustable wrench is required. See figure 22.

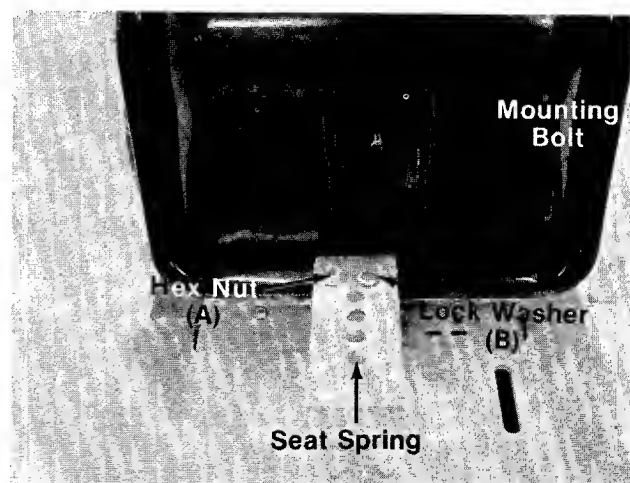


FIGURE 22.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) requires no adjustment. Automotive steering principals have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in follow these steps.

1. Remove the elastic lock nut and drop the tie rod end from the wheel bracket. See figure 23.

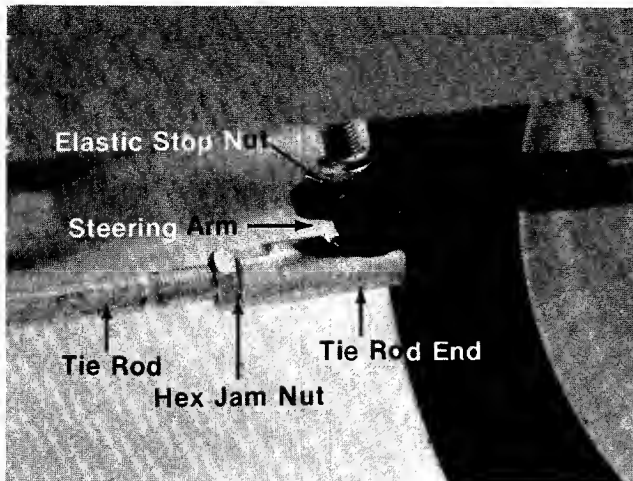


FIGURE 23.

2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

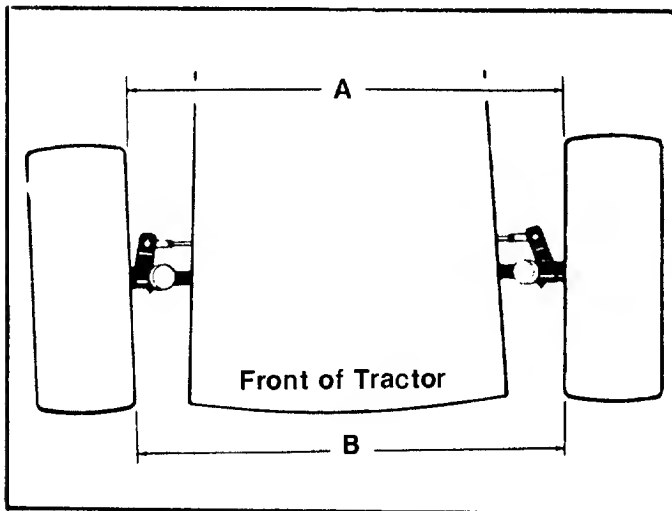


FIGURE 24. TOE-IN DIAGRAM

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 24.

- A.) To increase Dimension "B," screw tie rod into tie rod end.
- B.) To decrease Dimension "B," unscrew tie rod from tie rod end.
- C.) Reassemble tie rod. Check dimensions. Re-adjust if necessary.

CARBURETOR ADJUSTMENT (See figure 25)



WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches, and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

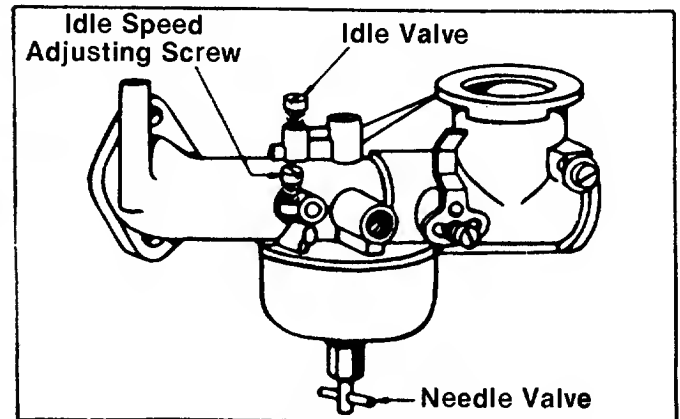


FIGURE 25. CARBURETOR ADJUSTMENT

To Adjust Carburetor—Turn needle valve clockwise until it just closes.



CAUTION

Valve may be damaged by turning it in too far.

Now open needle valve 1-1/8 turns counter-clockwise. Close idle valve in same manner and open 1-1/8 turns. This initial adjustment will permit the engine to be started and warmed up prior to final adjustment.

Final Adjustment—Turn needle valve in until engine misses (lean mixture). Then turn it out past smooth operating point until engine runs unevenly (rich mixture). Now turn needle valve to the mid-point between rich and lean so the engine runs smoothly. Hold throttle at idle position and set idle speed adjusting screw until fast idle is obtained (1750 RPM). Hold throttle in idle position and turn idle valve in (lean) and out (rich) until engine idles smoothly. Then reset idle speed adjusting screw so that engine idles at 1750 RPM. Release throttle—engine should accelerate without hesitation or sputtering. If engine does not accelerate properly, the carburetor should be readjusted to a slightly richer mixture.

ADJUSTING CARBURETOR CHOKE

Proper choke adjustment is dependent upon proper adjustment of remote controls on the powered equipment.

To Check Operation of Choke-A-Matic Controls:

Move control lever to CHOKE position. The carburetor choke should be closed.



The air cleaner can be removed to check the operation of the choke.

To Adjust:

Place control lever on equipment in FAST (high speed) position. Loosen control casing clamp screw B. Move control casing A and wire until lever D touches choke operating link at C. Tighten casing clamp screw B. See figure 26.

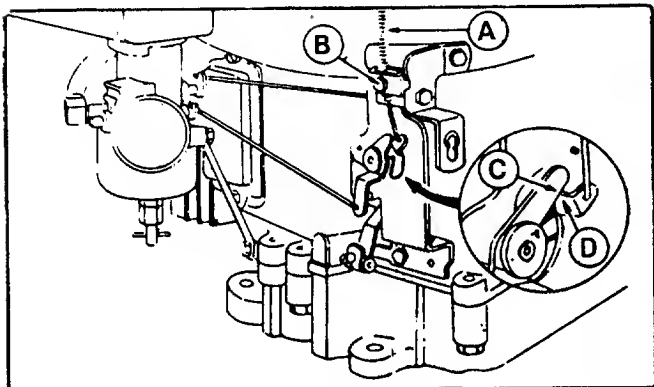


FIGURE 26. CHOKE ADJUSTMENT

BRAKE ADJUSTMENT

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.



CAUTION

Do not have the engine running when you adjust the brakes.

1. Move the brake pedal forward by hand until resistance is noted. This is the point where the brake pedal spring begins to stretch.
2. If adjustment is necessary, tighten or loosen the brake adjusting nuts until the correct dimension is obtained. See figure 27. Periodic adjustment is necessary to maintain effective brake operation.

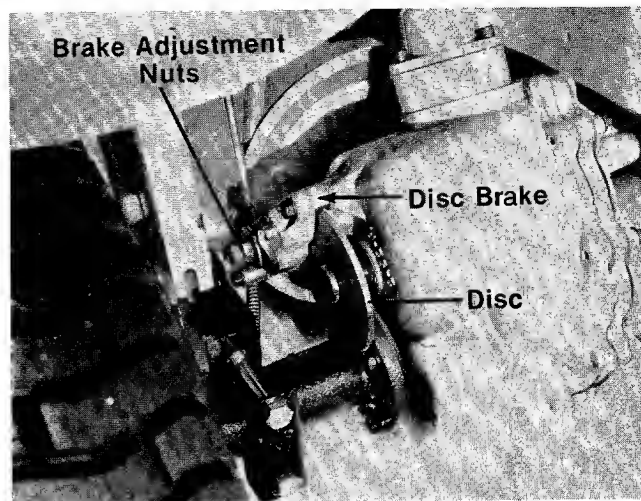


FIGURE 27.

3. If the adjustment is correct, the brake lock should move $\frac{1}{4}$ inch. See figure 28.

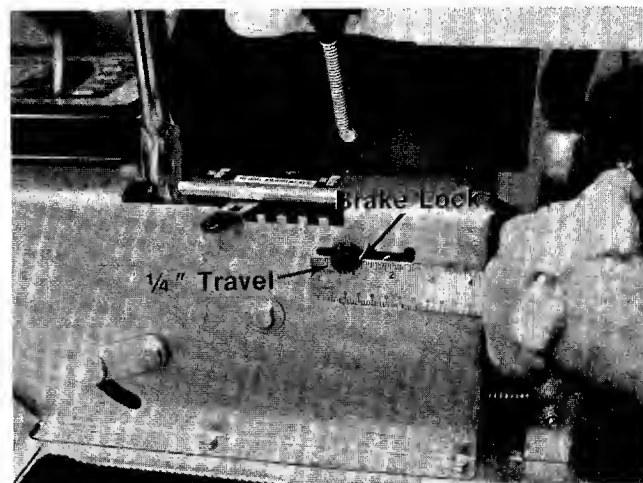


FIGURE 28.

LUBRICATION

1. **Wheel Bearings (4).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. See figure 29.
2. **King Pins (2).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. See figure 29.
3. **Front Pivot Bolt (1).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. See figure 29.

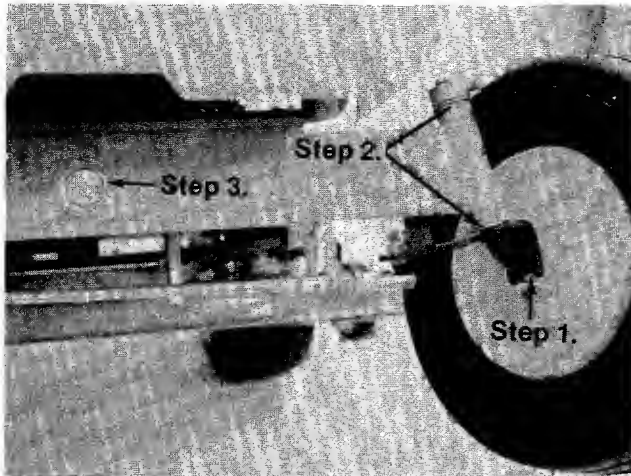


FIGURE 29.

4. **Steering Gears (2).** Lubricate teeth of gears with automotive multi-purpose grease after every 25 hours of operation or once a season. See figure 30.
5. **Steering Column Bearings (2).** Lubricate the top and bottom bearings with SAE 30 oil after every 25 hours of operation or once a season. See figure 30.
6. **Steering Shaft Bearings (2).** Require no lubrication. See figure 30.

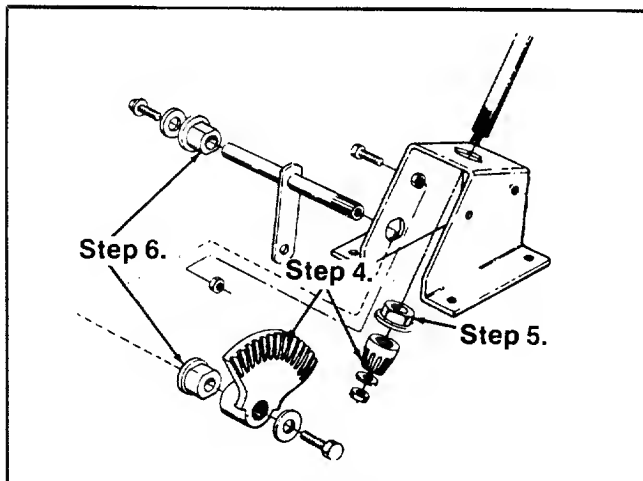


FIGURE 30.

7. **Transaxle.** Check oil level after every 25 hours of operation or once a season. Remove the rear plug to check. Oil should be to the point of overflowing. Drain and change oil every 2 years. Drain plug located on the bottom of the transaxle. It is lubricated with 1½ pints of SAE EP 90 oil. See figure 31.

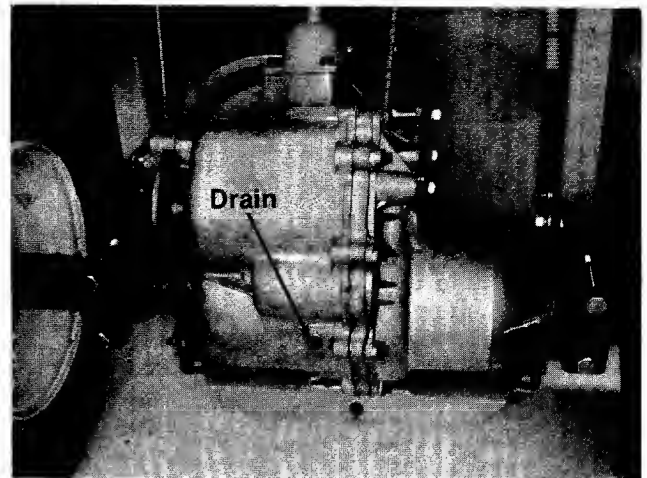


FIGURE 31.

The following parts should be oiled once a year with SAE 30 oil.

1. All deck links.
2. Clutch and brake pivot points and linkages.
3. Height adjustment levers.
4. Steering column bearings.

The following items have sealed bearings and require no further lubrication.

1. Blade Spindles
2. Idler Bearings
3. Tie Rod Ends

MAINTENANCE



Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Oil Check

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil should be kept between the add and full marks on the dipstick. See figure 32.

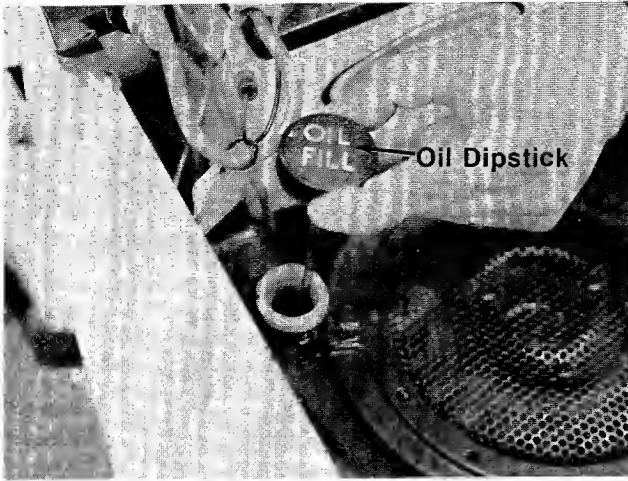


FIGURE 32.

After the first five hours of operating a new engine, drain the oil (see figure 33) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. This procedure ensures minimum wear of engine parts. To change the oil, proceed as follows:

1. With the machine on level ground, place a suitable metal container under the oil drain plug, then remove the drain plug. See figure 33.

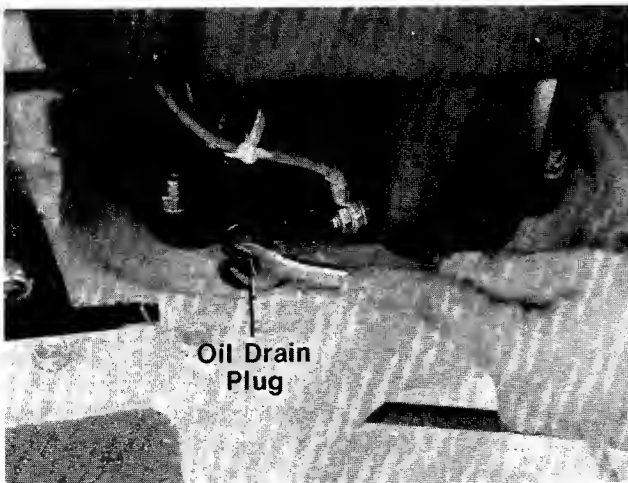


FIGURE 33.

2. After the oil has been drained completely from the crankcase, replace the drain plug and tighten.
3. Refill crankcase with $2\frac{1}{4}$ pints of good quality, type MS, engine oil into the crankcase. Summer use SAE 30; Winter (below 40°F) use SAE 5W-20 or SAE 10W.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. Refer to figure 34.

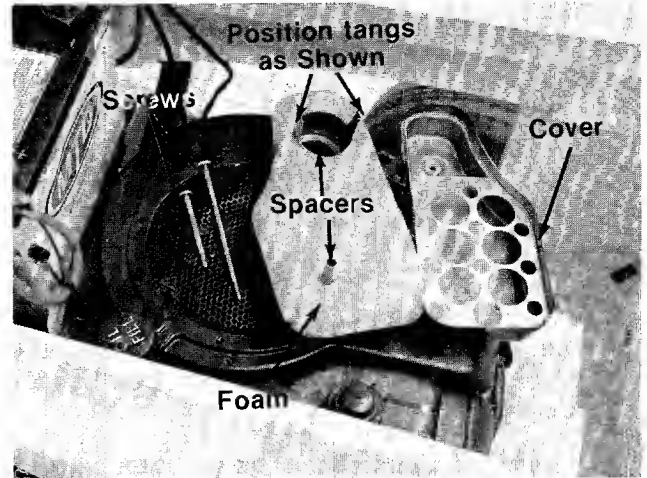


FIGURE 34.

When assembling the air cleaner, make certain the lip of the foam element extends over edge of the air cleaner body. The foam element will form a protective seal.

1. Remove two screws and lift off complete air cleaner assembly.
2. Remove screen and spacers from foam element.
3. Remove foam element from air cleaner body.
4. a. Wash foam element in kerosene or liquid detergent and water to remove dirt.
b. Wrap foam in cloth and squeeze dry.
c. Saturate foam in SAE 30 engine oil, then squeeze out excess oil.
d. Assemble parts. Fasten to carburetor with screw.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

BELTS

Check that belts are free of oil or dirt. Wipe the belts periodically with a clean rag.

NOTE

Belt tension is maintained by the spring on the idler bracket on the drive belts and the belt tension on the deck belt is maintained by the two deck springs.

SPARK PLUG

The spark plug should be cleaned and the gap reset to a 0.030-inch clearance once a season (see figures 35 and 36). Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type.

NOTE

Whenever the spark plug is removed for cleaning, it is advisable to replace the spark plug gasket with a new gasket.

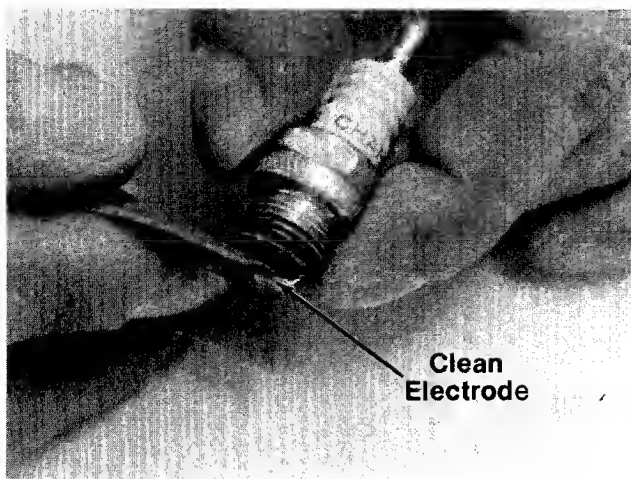


FIGURE 35.

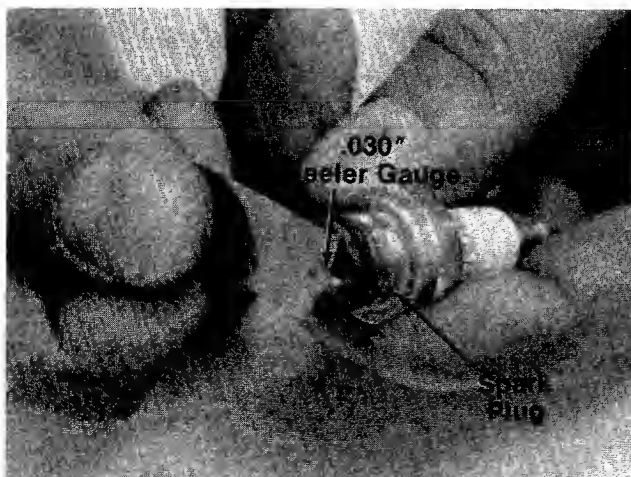


FIGURE 36.

REPLACING BLADE



WARNING

Before beginning work on the cutter blade, remove the spark plug from the cylinder.

Removing and Sharpening Blades. Remove the center bolt and lock washer. See figure 37. Pull the blade and blade adapter from the blade spindle.

The adapter can be removed from the blade by removing the two adapter bolts, lock washers and nuts.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

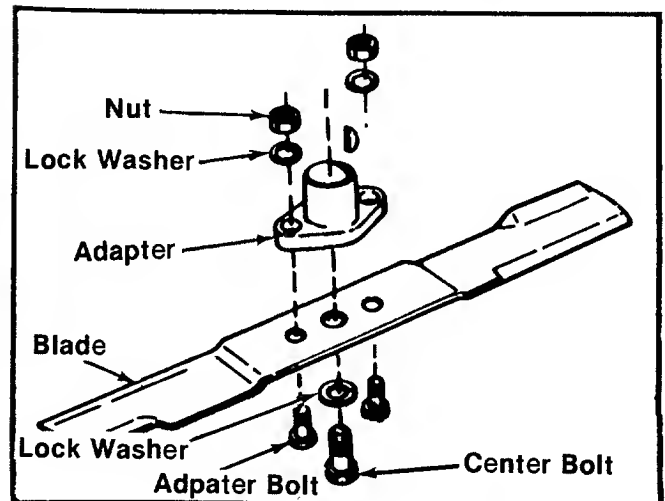


FIGURE 37. BLADE REMOVAL

NOTE

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

BELT REMOVAL AND REPLACEMENT

Preparation



WARNING

Disconnect the spark plug wire and ground it against the engine.

1. Remove the battery.



CAUTION

Disconnect the negative terminal first and connect last when installing the battery.

2. To prevent gasoline from leaking from the engine, remove the gasoline cap, place a piece of thin plastic over the neck of the gasoline tank and screw on the cap.
3. Close the fuel shut-off valve.
4. Set the brake and lock it.
5. Lift the front end of the rider up and rest it on the rear wheels. It will balance in this position.
6. Secure with rope to prevent tipping.
7. Do not leave the rider in this position any longer than necessary as oil may get into cylinder head. If this happens, remove the spark plug and crank over the engine to clear the oil.

Removing the Deck Belt

1. Place the lift lever in the disengaged position.
2. Remove the belt keeper and large bolt from the engine pulley. See figure 38.

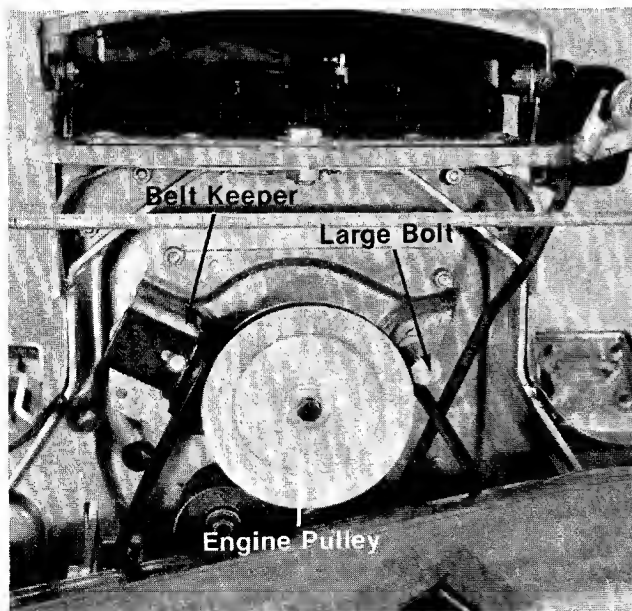


FIGURE 38.

3. Unhook the deck belt from the engine pulley.
4. Place the lift lever in the engaged position.
5. Remove the two deck tension springs. See figure 39.

6. Remove the cotter pins holding the four front deck links. The deck can now be tipped forward. See figure 39.
7. Remove the belt guard on the left deck pulley by removing the two bolts and nuts.
8. Remove the three shoulder bolts and washers next to the right deck pulley.
9. Remove and replace the deck belt. Reassemble in reverse order.



CAUTION

Be sure to remove plastic from beneath gasoline cap.

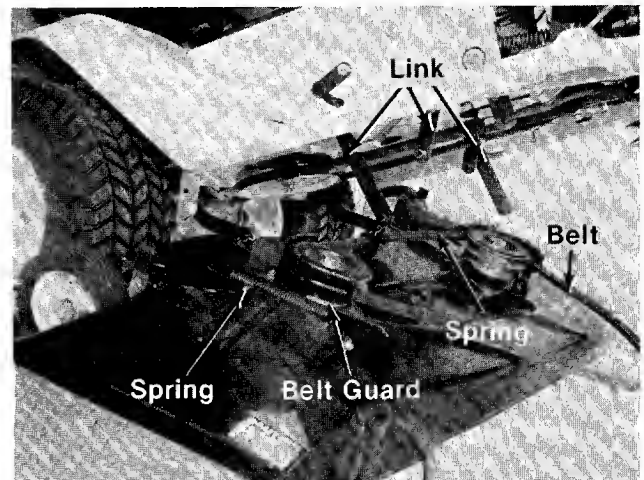


FIGURE 39.

Removing the Front Transmission Belt

1. Follow steps 1 through 6 on Preparing for Belt Removal.
2. Place the lift lever in the disengaged position.
3. Remove the belt keeper and large bolt from the engine pulley. See figure 38.
4. Unhook the deck belt from the engine pulley.
5. Place the lift lever in the engaged position.
6. Unhook the tension springs. See figure 39.
7. Remove the six cotter pins holding the deck to the links.
8. Lift off the deck and set it aside.
9. Remove the engine belt guard by removing the two front engine mounting bolts. See figure 40.
10. Remove the wire belt keeper on frame. See figure 40.

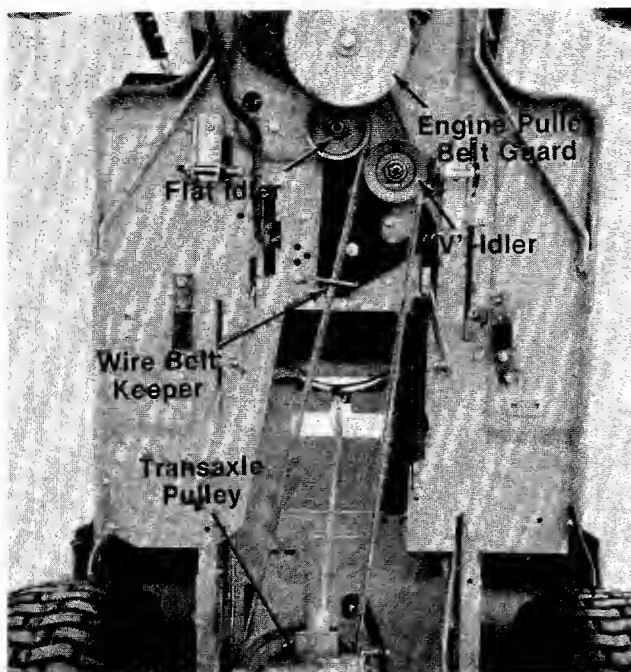


FIGURE 40.

11. Slide belt off the V-idler and remove.
12. Unhook the belt from the engine pulley. See figure 41.
13. Replace the belt and reassemble in reverse order.



CAUTION

Be sure to remove plastic from beneath gasoline cap.

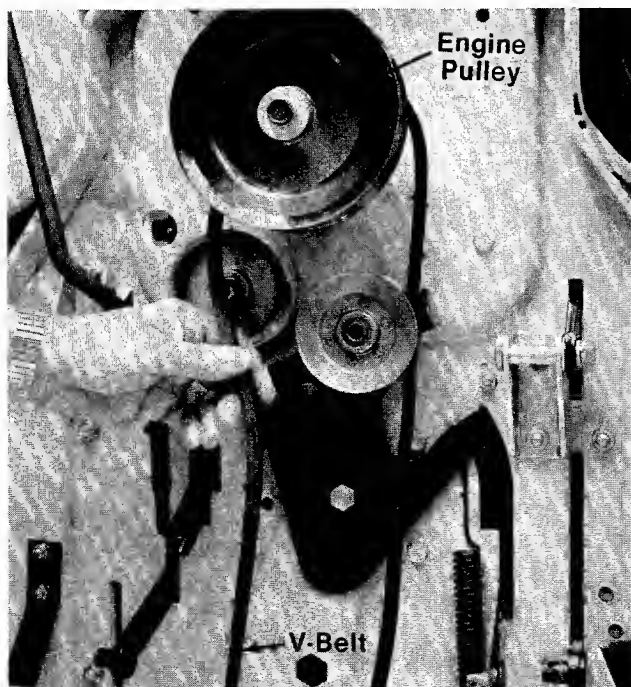


FIGURE 41.

BATTERY REMOVAL OR INSTALLATION



WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



WARNING

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte



NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, the following precautions are recommended:

Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in carburetor is exhausted.



Do not drain fuel while smoking, or if near an open fire.

Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil.

Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.

Clean the engine and the entire mower thoroughly.

Lubricate all lubrication points indicated in figures 29, 30 and 31. Then wipe the entire machine with an oiled rag in order to protect the surfaces.

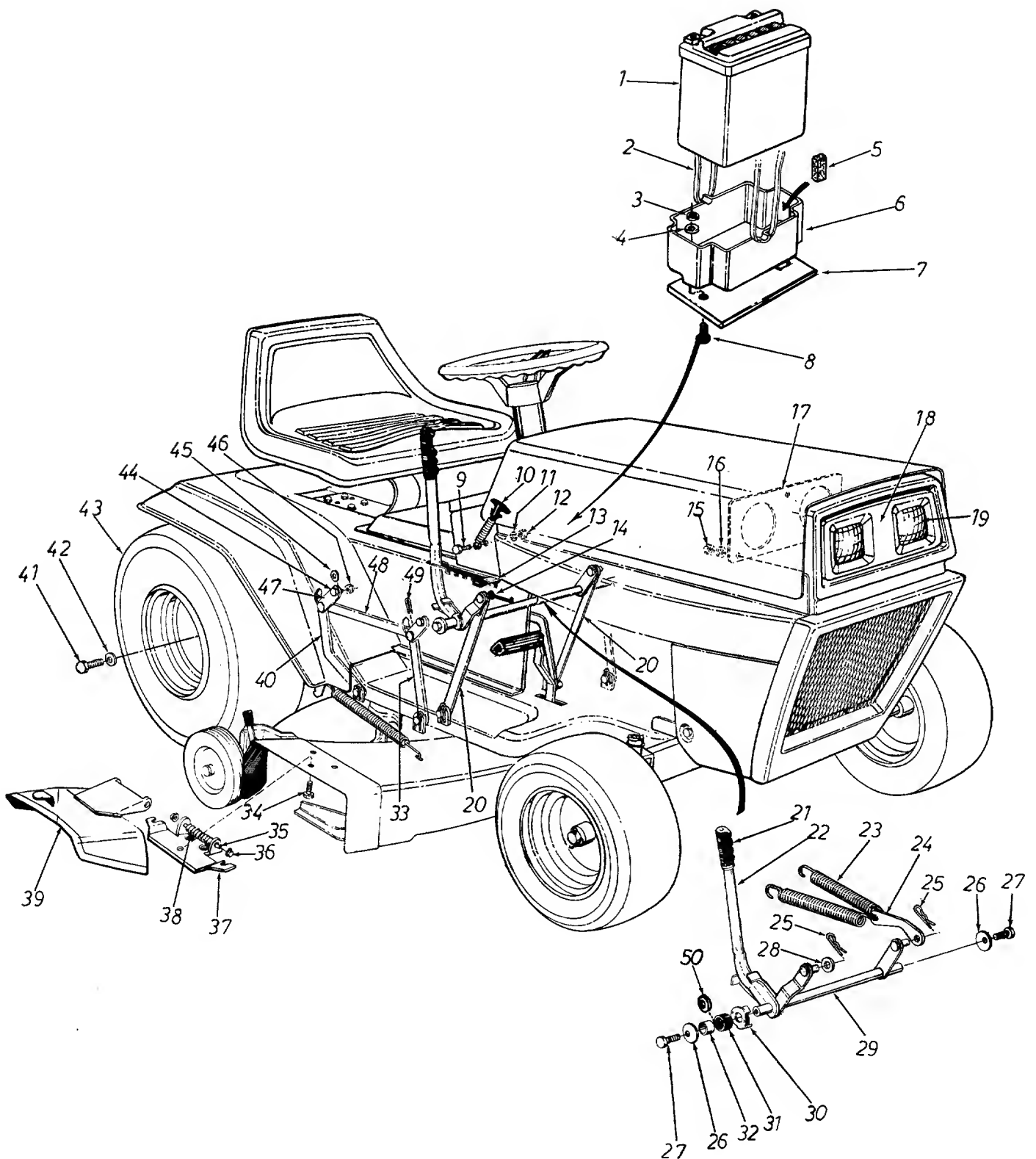
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blow fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	<p>Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger.</p> <p>Trickle Charger. Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C. rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1½ amp.</p> <p>Alternator (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.</p> <div style="text-align: center;"> </div> <p>The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.</p>
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) for starting.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade spindles, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low	Throttle must be set between 3/4 and full throttle.
	Transmission selection	Use lower transmission speed. The slower your ground speed, the better the quality of cut.
	Blades short or dull	Sharpen or replace blades (uncut strip problem only).

131-497A



RIGHT HAND VIEW

131-497A

PARTS LIST FOR RIGHT HAND VIEW MODEL 131-497A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0514		12V-Battery	N	28	736-0192		FI-Wash. .531" I.D. x 1.13" O.D.	
2	735-0204		Rubber Band		29	13630		Lift Handle Brkt. Ass'y.	
3	712-0287		Hex Nut 1/4-20 Thd.*		30	11029		Handle Pivot Brkt.	
4	736-0142		FI-Wash. .281" I.D. x .50" O.D.		31	735-0195		Rubber Wash.	
5	722-0135		P.V.C. Foam	N	32	748-0273		Spacer .635" I.D. x .88" O.D.	
6	731-0534		Battery Box		33	10904		Deck Link Ass'y.	
7	14464		Reinforcement Plate		34	710-0195		Hex Bolt 1/4-28 x .62" Lg.*	
8	710-0377		Hex Bolt 1/4-20 x .62" Lg.*		35	711-0571		Pivot Pin	
9	710-0289		Hex Bolt 1/4-20 x .50" Lg.*	N	36	726-0106		Push-On Flange Palnut	
10	723-0296		Hood Latch Ass'y.		37	11399		Adapter Plate	
11	736-0329		L-Wash. 1/4" I.D.*		38	732-0261		Torsion Spring	
12	712-0287		Hex Nut 1/4-20 Thd.*		39	11574		Chute Cover Ass'y.	
13	11027		Handle Stop Brkt. Ass'y.	N	40	10349		Deck Link Ass'y.	
14	726-0121		Push Cap 1/4" Dia. Black		41	710-0627		Hex Bolt 5/16-24 x .75" Lg.*	
15	712-0287		Hex Nut 1/4-20 Thd.*		42	736-0242		Bell-Wash. .345" I.D. x .88" O.D.	
16	736-0329		L-Wash. 1/4" I.D.*		43	734-0601		Rear Wheel Ass'y.—Comp. 18 x 8.50	
17	12788		Head Lamp Retainer	N	45	736-0264		FI-Wash. .344" I.D. x .62" O.D.	
18	12787		Head Lamp Bezel		46	712-0267		Hex Nut 5/16-18 Thd.*	
19	725-0222		Headlight		47	09721		Pivot Link Ass'y.	
20	13636		Lockout Link Ass'y.		48	09735		Connecting Rod 3/16 x 1.0" x 12.5" Lg.	
21	720-0157		Grip	N	49	714-0101		Inter. Cot. Pin 1/2" Dia.	
22	749-0212		Lift Handle		50	736-0237		FI-Wash.	
23	732-0232		Spring .62" Dia. x 6.125" Lg.						
24	13638		Spring Link						
25	714-0101		Inter. Cotter Pin 1/2" Dia.	N					
26	736-0133		Bell-Wash. .400" I.D. x 1.25" O.D.						
27	710-0201		Hex Bolt 3/8-16 x .62" Lg.*						

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

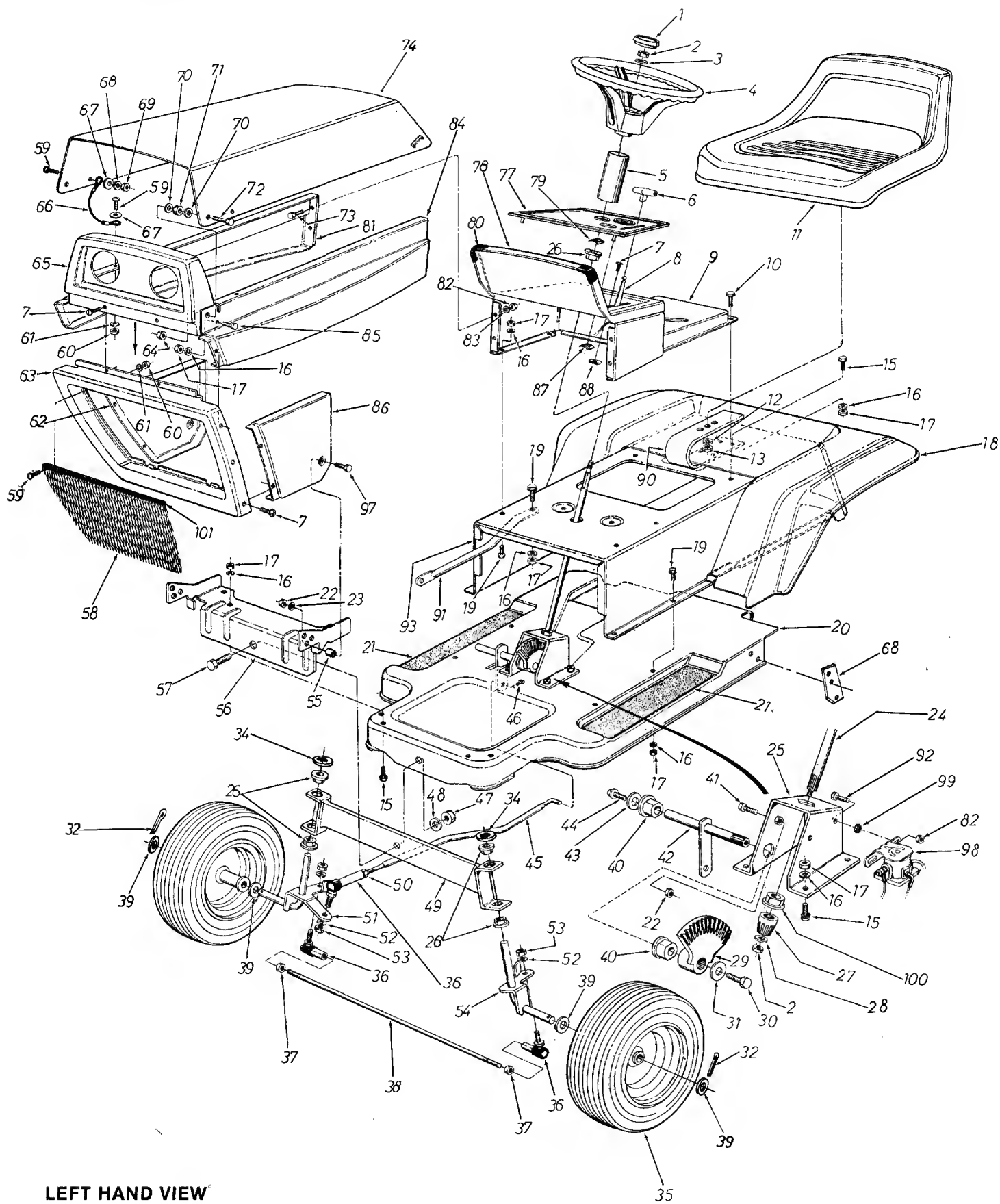


This instruction manual covers various models, and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

WHEEL CHART

FRONT WHEEL			REAR WHEEL	
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	
734-0988	Wheel Ass'y. Comp.	734-0601	Wheel Ass'y. Comp.	
734-0997	Rim Ass'y. Only	734-0603	Rim Ass'y. Only	
734-0498	Tire Only 15 x 6.00	734-0516	Tire Only 18 x 8.50	
734-0255	Air Valve	734-0255	Air Valve	
741-0213	Bearing 748-0227			

131-497A



LEFT HAND VIEW

131-497A

PARTS LIST FOR LEFT HAND VIEW MODEL 131-497A

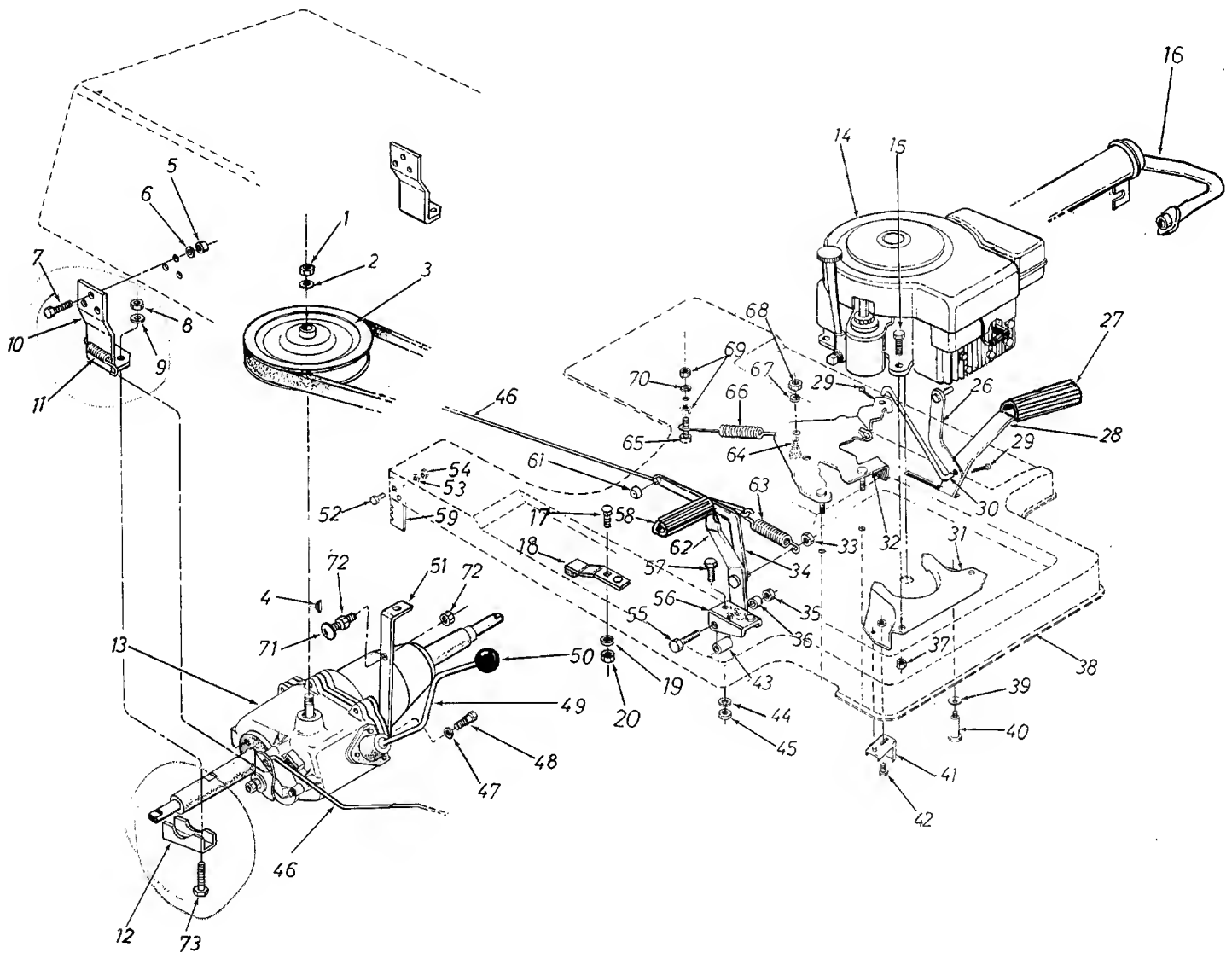
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap		46	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*	
2	712-0158		Hex Cent. L-Nut 5/16-18 Thd.		47	712-0923		Hex Cent. L-Nut 5/8-16 Thd.	
3	736-0242		Bell-Wash. .345 I.D. x .88 O.D.		48	736-0158		L-Wash. 5/8" Scr.*	
4	731-0356		Steering Wheel		49	14198		Front Pivot Bar Ass'y.	
5	750-0319		Steering Tube		50	712-0711		Hex Jam Nut 3/8-24 Thd.	
6	722-0111		Knob—Throttle Control		51	14452		Axle Ass'y.—Front R.H.	N
7	710-0227		Hex AG-Tap. Scr. #8 x .50" Lg.		52	736-0169		L-Wash. 3/8" Scr.*	
8	746-0356		Throttle Control Ass'y. Comp.		53	712-0241		Hex Nut 3/8-24 Thd.*	
9	13495		Transmission Cover		54	14453		Axle Ass'y.—Front L.H.	N
10	710-0599		Hex C-Tap Scr. 1/4-20 x .50" Lg.		55	748-0193		Spacer .380 I.D. x .630 O.D. x .575 Lg.	
11	757-0264		Seat Ass'y.		56	12411		Front Pivot Bracket	
12	736-0921		L-Wash. 1/2" Scr.*		57	710-0622		Hex Scr. 5/8-18 x 1.62" Lg.*	
13	712-0206		Hex Nut 1/2-13 Thd.*		58	12791		Grille Screen	
15	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*		59	710-0192		Truss Scr. #10-24 x .375" Lg.*	
16	736-0119		L-Wash. 5/16" Scr.*		60	712-0121		Hex Nut #10-24 Thd.*	
17	712-0267		Hex Nut 5/16-18 Thd.*		61	736-0722		L-Wash. #10 Scr.*	
18	11839 —462		Rear Fender		62	12782 —462		Lower Side Panel R.H.	
19	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*		63	12781 —462		Lower Grille Panel	
20	13460		Frame Assembly		64	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
21	723-0241		Foot Pad 15.75 x 4.00"		65	12814 —462		Front Grille Upper Ass'y.	
22	712-0798		Hex Nut 3/8-16 Thd.*		66	727-0199		Hood Stop	
23	736-0105		Bell-Wash. .400 I.D. x .88 O.D.		67	736-0463		FI-Wash. .25 I.D. x .62 O.D.	
24	738-0317		Steering Shaft		68	736-0722		L-Wash. #10 Scr.*	
25	12850		Steering Gear Support Ass'y.		69	712-0121		Hex Nut #10-24 Thd.*	
26	744-0313		Flange Bearing 7/8-0227		70	736-0101		FI-Wash. .380 I.D. x 1.00 O.D.	
27	748-0237		Pinion Gear		71	735-0126		Rubber Wash. .33 I.D. x .87 O.D.	
28	736-0264		FI-Wash. .344 I.D. x .62 O.D.		72	710-0253		Hex Scr. 3/8-16 x 1.00" Lg.*	
29	748-0236		Side Gear		73	710-0258		Hex Scr. 1/4-20 x .62" Lg.*	
30	710-0180		Hex Scr. 3/8-24 x .75" Lg.*		74	12780 —462		Front Hood	
31	736-0133		FI-Wash. .406 I.D. x 1.25 O.D.		75	748-0227		Hex Flange Bearing .630 I.D.	
32	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*		77	731-0476		Dash Panel Insert	
34	726-0159		Push Nut		78	13877		Dash Panel Ass'y.	
35	734-0998		Front Wheel Ass'y.—Comp. 15 x 6		79	712-0222		Speed Nut Push-On 5/8" Dia.	
36	723-0156		Ball Joint Ass'y. 3/8-24 Thd.		80	757-0272		Trim Strip (15" Lg.)	
37	712-0711		Hex Jam Nut 3/8-24 Thd.		81	13974 —462		Side Panel R.H.	
38	711-0613		Tie Rod		82	726-0155		Speed Nut #10Z	
39	736-0156		FI-Wash. .635 I.D. x 1.20 O.D.		83	736-0329		L-Wash. 1/4" Scr.*	
40	748-0199		Plastic Flange Brg. w/Flats .75 I.D. 741-0199		84	12785 —462		Side Panel L.H.	
41	710-0670		Hex Nylon Scr. 3/8-16 x 1.25" Lg.		85	710-0621		Hex Scr. 5/16-18 x .50" Lg.*	
42	12749		Steering Arm Shaft Ass'y.		86	12783 —462		Lower Side Panel L.H.	
43	736-0133		FI-Wash. .406 I.D. x 1.25 O.D.		90	732-0354		Seat Spring 4.125" High	
44	710-0180		Hex Scr. 3/8-24 x .75" Lg.*		91	11095		Engine Brace	
45	747-0186		Steering Rod		92	710-0436		Hex Scr. 10-24 x .62" Lg.*	
					93	13466		Upper Frame	
					97	710-0342		Hex Scr. 3/8-16 x 1.25" Lg.*	
					98	725-0530		Solenoid	
					99	731-0481		Plastic Edge	
					100	748-0227		Flange Brg. .630 I.D.	
					101	731-0144		Ext. Vinyl U-Channel	
					102	712-0237		Nut 5/16-24	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

131-497A



FRAME VIEW

131-497A

PARTS LIST FOR FRAME VIEW MODEL 131-497A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	712-0922		Hex Jam Nut 1/2-20 Thd.*		42	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
2	736-0921		L-Wash. 1/2" Scr.*		43	750-0298		Spacer .384 I.D. x .500 O.D. x 1.43" Lg.	
3	756-0267		Transmission Split Pulley .50" I.D.		44	736-0119		L-Wash. 5/16" Scr.*	
4	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.		45	712-0267		Hex Nut 5/16-18 Thd.*	
5	712-0267		Hex Nut 5/16-18 Thd.*		46	747-0106		Brake Rod .25" Dia. x 23.40" Lg.	
6	736-0119		L-Wash. 5/16" Scr.*		47	736-0242		Bell. Wash. .345 I.D. x .88 O.D.	
7	710-0118		Hex Scr. 5/16-18 x .75" Lg.*		48	710-0371		Hex Scr. 5/16-18 x .88" Special	
8	712-0798		Hex Ins. L-Nut 3/8-16 Thd.		49	717-0391		Shift Lever for Transaxle	
9	736-0169		L-Wash. 3/8" Scr.*		50	720-0165		Gear Shift Knob	
10	13438		Transaxle "U" Brkt.		51	11850		Transaxle Support Brkt.	
11	732-0157		Spring .38 O.D. x 3.25" Lg.		52	710-0258		Hex Scr. 1/4-20 x .62" Lg.*	
12	13892		Rear Axle Brkt.		53	736-0329		L-Wash. 1/4" Scr.*	
13	—		Transaxle Complete		54	712-0287		Hex Nut 1/4-20 Thd.*	
14	10 H.P.		Engine B & S		55	710-0194		Hex Scr. 3/8-16 x 3.00" Lg.*	
15	710-0442		Hex Scr. 5/16-18 x 1.50" Lg.*			738-0213		Shld. Bolt .498 Dia. x 1.450 for Clutch Pedal	
16	751-0263		Muffler		56	11039		Pedal "U"-Brkt. Ass'y.	
17	710-0134		Carriage Bolt 1/4-20 x .62" Lg.*		57	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.	
18	761-0169		Blade Brake Ass'y.		58	735-0201		Brake Pedal Pad	N
19	736-0329		L-Wash. 1/4" Scr.*		59	10410		Spring Brkt.	
20	712-0287		Hex Nut 1/4-20 Thd.*		61	726-0121		Push Cap 1/4" Dia. Black	
26	11057		Parking Brake Lever Ass'y.		62	14219		Brake Pedal Ass'y.	N
27	735-0201		Clutch Pedal Pad	N	63	732-0245		Extension Spring .90 O.D. x 3.75" Lg.	
28	14220		Clutch Pedal Ass'y.	N	64	738-0140		Shld. Scr. .437 Dia. x .180	
29	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*		65	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
30	747-0112		Clutch Rod		66	732-0191		Spring .75 O.D. x 11.00" Lg.	
31	12654		Belt Guard Ass'y.—Engine		67	736-0119		L-Wash. 5/16" Scr.*	
32	12448		Idler Brkt. Ass'y.		68	712-0267		Hex Nut 5/16-18 Thd.*	
33	712-0158		Hex Cent. L-Nut 5/16-18 Thd.		69	712-0267		Hex Nut 5/16-18 Thd.*	
34	13875		Parking Brake—Lever Ass'y.		70	736-0119		L-Wash. 5/16" Scr.*	
35	712-0375		Hex Cent. L-Nut 3/8-16 Thd.		71	710-0262		Carr. Bolt 5/16-18 x 1.50" Lg.*	
36	711-0630		Spacer .380 I.D. x .50 O.D. x .562		72	712-0267		Hex Nut 5/16-18 Thd.*	
37	712-0267		Hex Nut 5/16-18 Thd.*		73	710-0194		Hex Bolt 3/8-16 x 3.00" Lg.*	
38	13460		Frame Ass'y.						
39	736-0105		Bell. Wash. .400 I.D. x .88 O.D.						
40	738-0215		Shld. Scr. .489" Dia. x 3.00" Lg.						
41	12160		Belt Keeper Ass'y.						

(462—Red Flake)

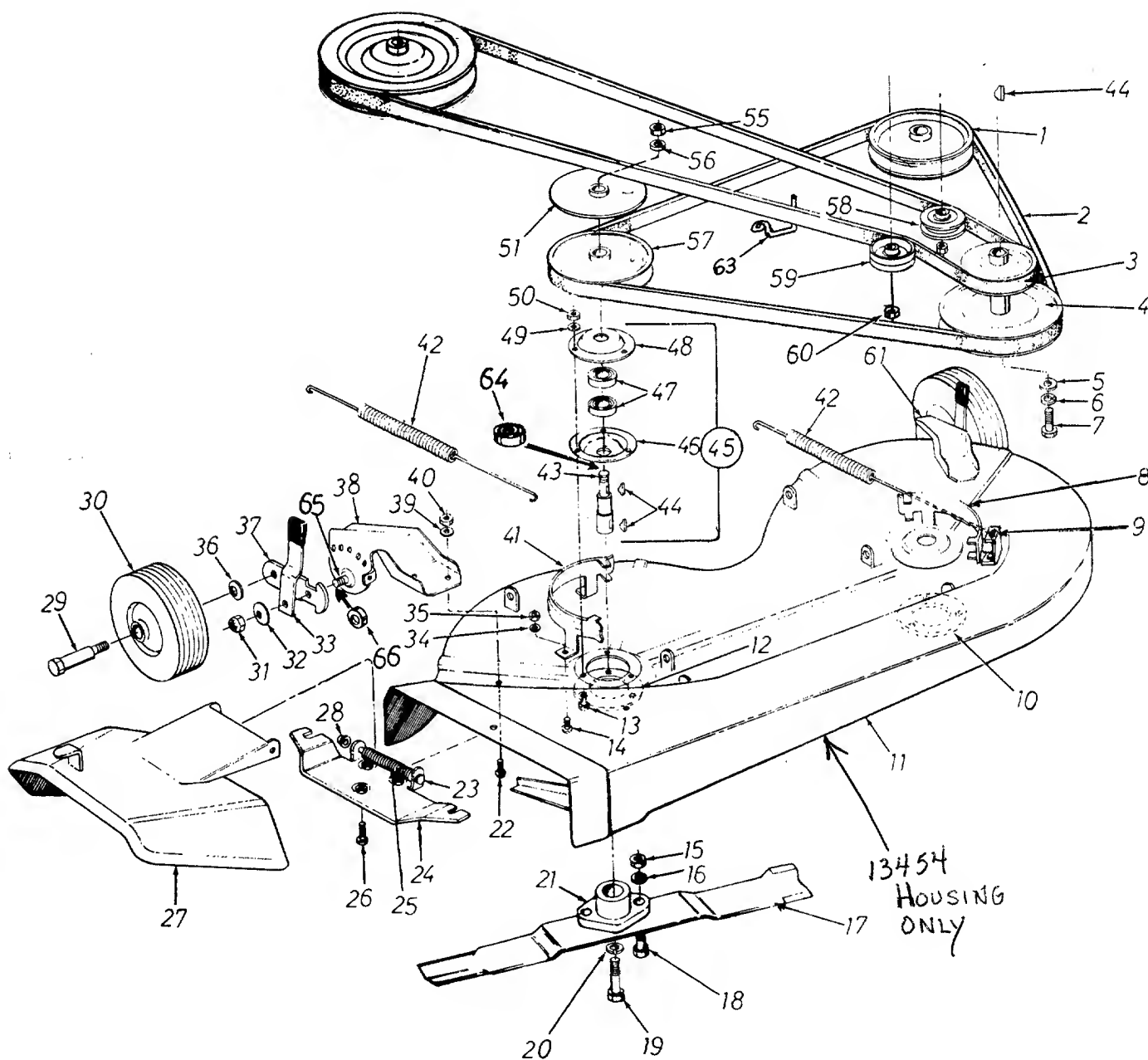
*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

131-497A



Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide a temporary service.



DECK VIEW

PARTS LIST FOR DECK VIEW MODEL 131-497A

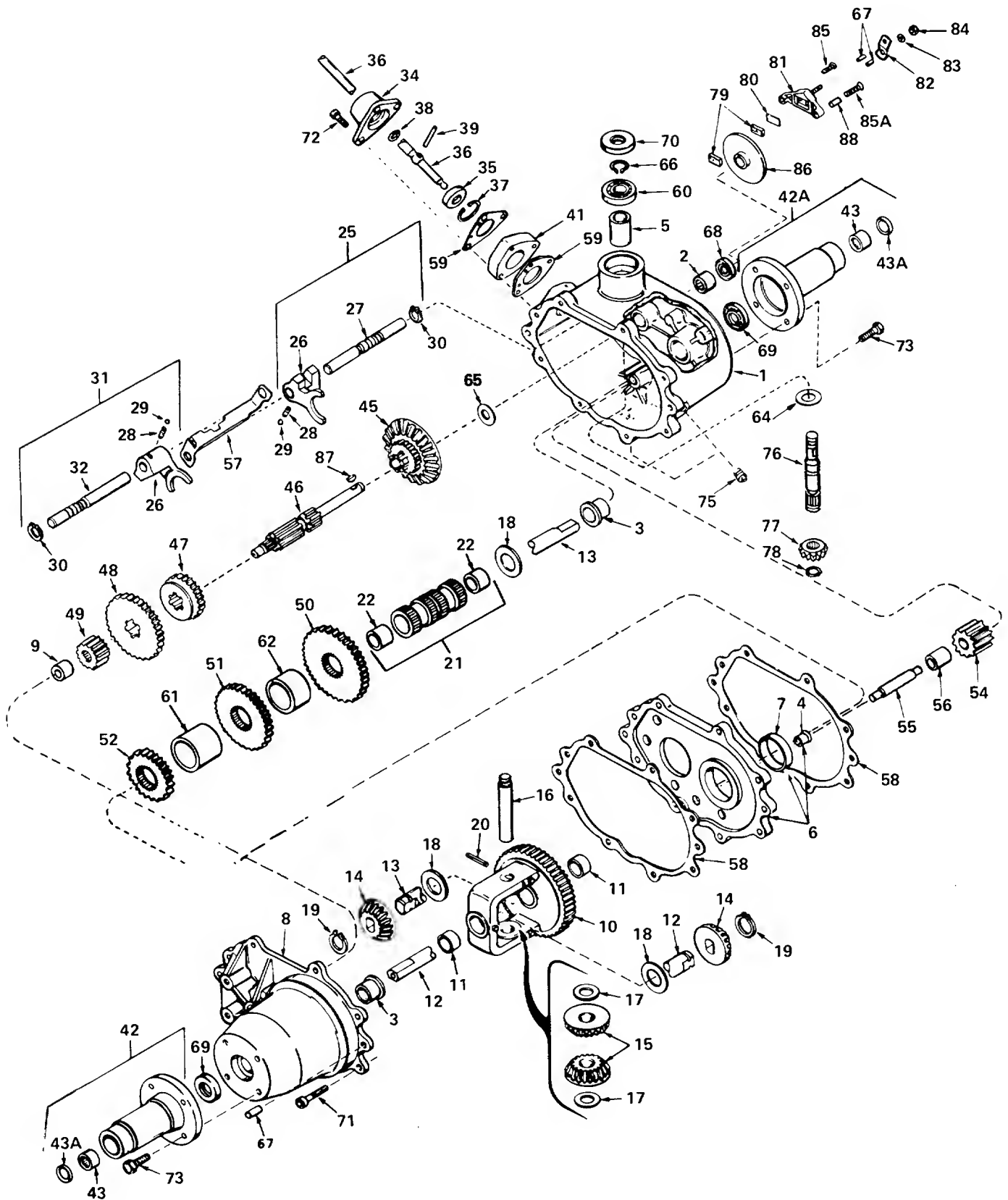
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	756-0251		Deck Pulley 4.75" O.D.		32	736-0219		Bell. Wash. .400 I.D. x .88 O.D.	
2	754-0145		"V"-Belt 21/32 x 69" Lg. (Blade Drive Belt)		33	14082		Spring Lever Ass'y. w/Knob	
3	754-0226		"V"-Belt 1/2 x 82" Lg. (Transmission)		34	736-0329		L-Wash. 1/4" Scr.*	
4	756-0302		Two Step Engine Pulley		35	712-0287		Hex Nut 1/4-20 Thd.*	
5	711-0572		Step Wash. O.D.		36	736-0105		Bell. Wash. .400 I.D. x .88 O.D.	
6	736-0169		L-Wash. 3/8" Scr.*		37	10937		Wheel Pivot Bar	
7	710-0331		Hex Scr. 3/8-24 x 2.25" Lg. (Grade 5)		38	09080		Wheel Brkt.—R.H. (Deck)	
8	12672		Belt Guard—L.H. Deck		39	736-0329		L-Wash. 1/4" Scr.*	
9	12405		Deck Spring Brkt.		40	712-0287		Hex Nut 1/4-20 Thd.*	
10	09164		Deck Reinforcement Plate		41	12673		Belt Guard—R.H. (Deck)	
11	13453		38" Deck Ass'y. <u>Comp.</u>		42	732-0307		Extension Spring	
12	09164		Deck Reinforcement Plate		43	711-0255		Blade Spindle	
13	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*		44	714-0365		#6 Hi-Pro Key 5/32 x 5/8" Dia.	
14	710-0289		Hex Scr. 1/4-20 x .50" Lg.*		45	09321		Spindle Ass'y. Comp. (Deck)	
15	712-0123		Hex Nut 5/16-24 Thd.*		46	08253		Bearing Housing	
16	736-0119		L-Wash. 5/16" Scr.*		47	741-0919		Ball Bearing .787 I.D. x 1.85 O.D.	
17	742-0122		19" Blade		48	08253		Bearing Housing	
18	710-0117		Hex Scr. 5/16-24 x 1.00" Lg.		49	736-0329		L-Wash. 1/4" Scr.*	
19	710-0459		Hex Scr. 3/8-24 x 1.50" Lg. H.T.		50	712-0287		Hex Nut 1/4-20 Thd.*	
20	736-0217		L-Wash. 3/8" Scr. (Heavy Duty)		51	09322		Blade Brake Disc	
21	748-0189		Blade Adapter		55	712-0261		Hex Jam Nut 5/8-11 Thd.	
22	710-0289		Hex Scr. 1/4-20 x .50" Lg.*		56	736-0158		L-Wash. 5/8" Scr.*	
23	711-0571		Pivot Pin		57	756-0251		Deck Pulley 4.75" O.D.	
24	11399		Adapter Plate Ass'y.		58	756-0116		"V"-Belt Idler 3.06" O.D.	
25	732-0261		Torsion Spring		59	756-0217		Fl. Idler 2.75" O.D. w/Flanges	
26	710-0195		Hex Scr. 1/4-28 x .62" Lg.*		60	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
27	11574		Chute Cover Ass'y.		61	09082		Wheel Brkt.—L.H. (Deck)	
28	726-0106		Push Nut—1/4" Rod		63	732-0358		Belt Trap	
29	738-0373		Shld. Scr. .478 Dia. x 1.53" Lg.		64	13703		Bearing Shield	
30	734-0973		Wheel Ass'y.—5.0 x 1.38 Dia. (Deck)		65	710-0342		Hex Bolt 3/8-16 x 1.00" Lg.	
31	712-0181		Hex L-Nut 3/8-16 Thd.		66	748-0279		Shoulder Spacer	
						12362		38" Deck Ass'y. <u>Comp.</u> (For Service) (Not Shown)	

(462—Red Flake)

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

131-497A



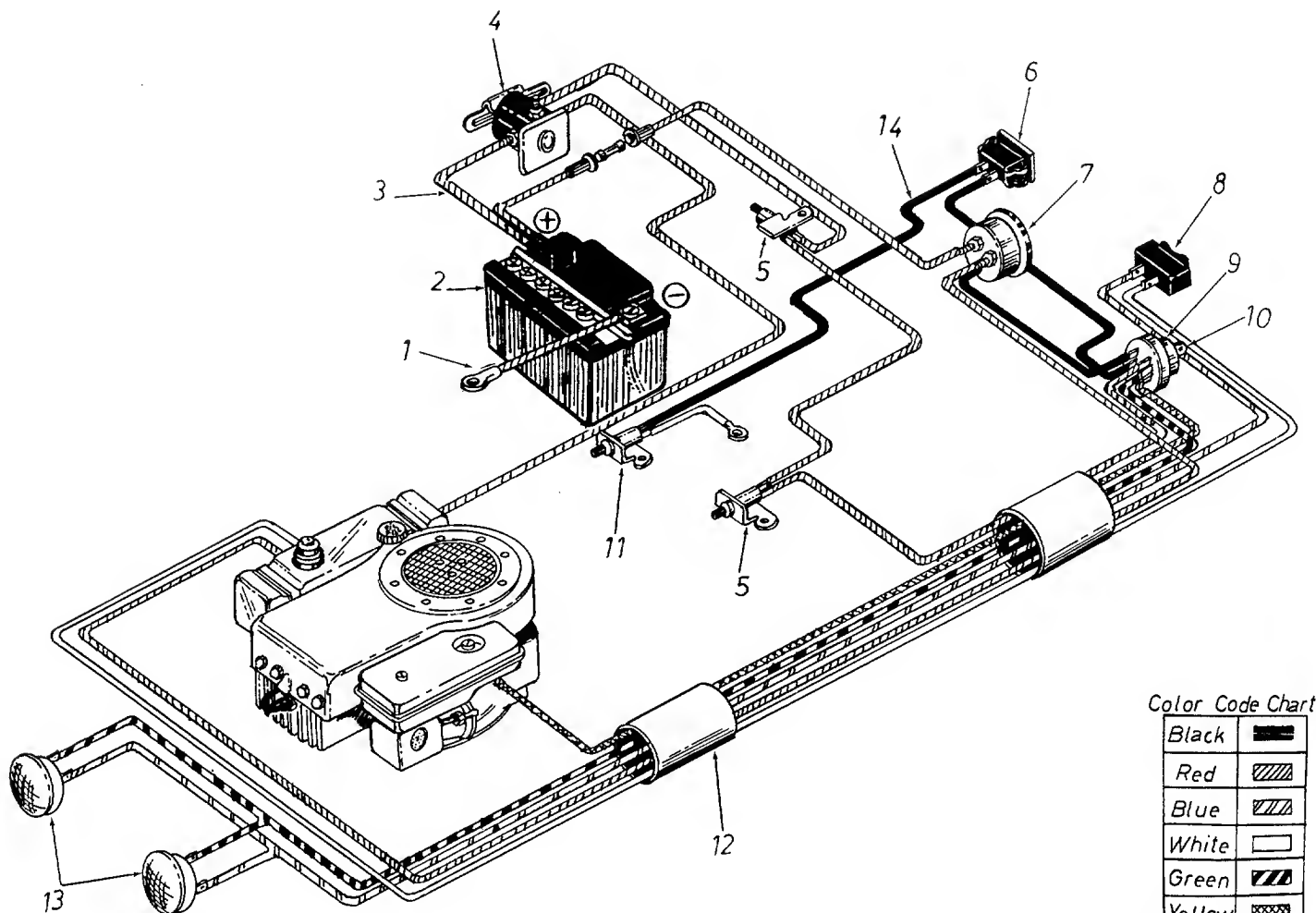
TRANSAXLE MODEL NO. 601-019 (717-0477)

131-497A

PARTS LIST FOR TRANSAXLE MODEL NO. 601-019 717-0477

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	PE-770063	Case Ass'y., Transaxle (Incl. Nos. 2, 3 & 5)	43A	PE-788042	Seal, Oil
2	PE-780086	Bearing, Needle	45	PE-778148A	Gear, Bevel (42 Teeth, 16 Tooth Spur Gear & 6 Tooth Spline)
3	PE-780059	Bearing, Bronze	46	PE-776138	Shaft, Shifter and Brake
4	PE-780060	Bearing, Bronze	47	PE-778058	Gear, Shifting (2nd & 3rd)
5	PE-780061	Bearing, Bronze	48	PE-778059	Gear, Shifting (1st & Rev.)
6	PE-786033	Plate Ass'y., Center (Incl. Nos. 4 & 7)	49	PE-778150	Gear, Spur (11 Teeth)
7	PE-780062	Bearing, Bronze	50	PE-778140	Gear, Countershaft Drive (39 Teeth)
8	PE-772042	Cover Ass'y., Transaxle (Incl. Nos. 3 & 9)	51	PE-778141	Gear, Countershaft (34 Teeth)
9	PE-780063	Bearing, Needle	52	PE-778142	Gear, Countershaft (25 Teeth)
10	PE-778053A	Gear Ass'y., Differential (Incl. No. 11)	54	PE-778064	Idler, Reverse
11	PE-780064	Bearing, Bronze	55	PE-776057	Shaft, Reverse Idler
12	PE-774340	Axle, Left Hand (10-27/32" Lg.)	56	PE-786036	Spacer, Reverse Idler
13	PE-774341	Axle, Right Hand (17-1/32" Lg.)	57	PE-784087	Stop, Shifter
14	PE-778067	Gear, Bevel	58	PE-788033	Gasket, Case & Cover
15	PE-778068	Pinion, Bevel	59	PE-788003	Gasket, Shift Lever Hsg.
16	PE-786034	Pin, Drive	60	PE-780093	Bearing, Ball
17	PE-780065	Washer, Thrust	61	PE-786078	Spacer
18	PE-780001	Washer, Thrust	62	PE-786079	Spacer
19	PE-788038	Ring, Snap	64	PE-780072	Washer, Thrust
20	PE-792040	Pin, Roll	65	PE-780065	Washer, Thrust
21	PE-786080	Sleeve Ass'y., Countershaft (Incl. No. 22)	66	PE-792035	Ring, Snap
22	PE-780066	Bearing, Bronze	67	PE-786026	Pin, Dowel
25	PE-784079	Rod Ass'y., Shift (1st & Rev.) (Incl. Nos. 26 thru 30)	68	PE-788043	Seal, Oil
26	PE-784004	Fork, Shift	69	PE-788009	Seal, Oil
27	PE-784083	Rod, Shift	70	PE-788035	Seal, Oil
28	PE-792003	Spring	71	PE-792036	Scr., Flanged Hex Hd., 1/4-20 x 1-1/4
29	PE-792004	Ball, Steel	72	PE-792051	Scr., Flanged Hex Hd., 1/4-20 x 1-3/4
30	PE-792017	Ring, Snap	73	PE-792037	Scr., Hex Hd. Sems, 5/16-18 x 1
31	PE-784084	Rod Ass'y., Shift (2nd & 3rd) (Incl. Nos. 26, 28, 29, 30 & 32)	75	PE-792039	Plug, Pipe, 1/8"
32	PE-784085	Rod, Shift	76	PE-776205	Shaft, Input
34	PE-784088	Housing, Shift Lever	77	PE-778149	Pinion, Input
35	PE-784094	Keeper, Shift Lever	78	PE-788040	Ring, Retaining
36	PE-784301	Lever, Shift	79	PE-790006	Pad, Brake
37	PE-792016	Ring, Snap	80	PE-790007	Plate, Brake Pad
38	PE-792001	Ring, Quad	81	PE-790005	Holder, Brake Pad
39	PE-792049	Pin, Drive	82	PE-790004	Lever, Brake
41	PE-786057	Block, Riser	83	PE-792076	Washer, Flat
42	PE-782036A	Hsg. Ass'y., Axle (Incl. #43) (2-11/16" Lg.)	84	PE-792075	Nut, Lock
42A	PE-782038A	Hsg. Ass'y., Axle (Incl. #43) (4-1/2" Lg.)	85	PE-792073	Scr., Hex Hd. Thread Form- ing, 1/4-20 x 1 1/4
43	PE-530105	Bearing, Needle	85A	PE-792085	Scr., Hex Hd. Thread Form- ing, 1/4-20 x 2 1/4
			86	PE-790009	Disc, Brake
			87	PE-792045	Key, Woodruff #61
			88	PE-786066	Spacer

131-497A



Color Code Chart

Black	
Red	
Blue	
White	
Green	
Yellow	
Orange	

ELECTRICAL SYSTEM FOR MODEL 131-497A

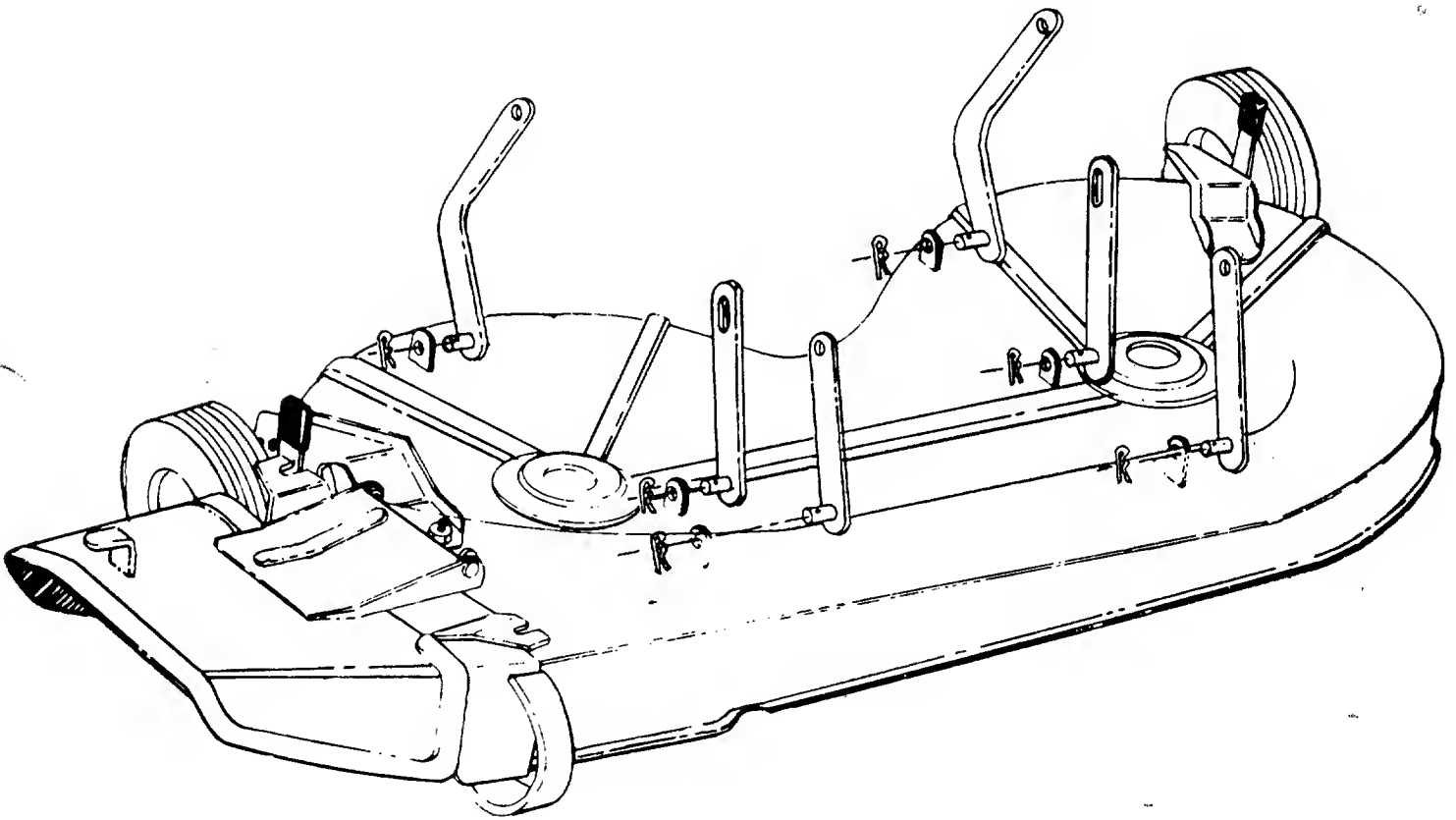
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0221		Cable	N
2	725-0514		12 V-Battery	
3	725-0122		Cable	
4	725-0530		Solenoid	
5	725-0268		Safety Switch	
6	725-0635		Indicator Light	
7	725-0119		Ammeter	
8	725-0634		Head Lamp Switch	
9	725-0267		Ignition Switch	
10	725-0201		Ignition Key	
11	725-0269		Safety Switch	
12	725-0738		Wire Harness	
13	725-0222		Head Lamp	
14	725-0429		Indicator Harness	

DECK LINKAGE



NOTE

Refer to illustration below for proper deck link hook up. If the deck is removed for any reason use the illustration below for correct assembly.



PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	BIRMINGHAM
Auto Electric & Carburetor Co.	2625 4th Ave. S. 35233
ARKANSAS	FORT SMITH
Mity Mite Motors, Inc.	4515 S. 16th St. 72901
	NORTH LITTLE ROCK
Sutton's Lawn Mower Shop	Rt. 4, Box 368 72117
CALIFORNIA	PORTERVILLE
Billious	75 North D Street 93257
	SAN FRANCISCO
J.W. Jewett Co.	981 Folsom St. 94107
COLORADO	DENVER
Spitzer Industrial Products Co. .	Box 59, 43 W. 9th Ave. . 80201
FLORIDA	JACKSONVILLE
Radco Distributors	4909 Victor St. 32207
	Box 5459 32207
	OPA LOCKA
Small Eng. Dist.	2351 N.W. 147th St. 33054
GEORGIA	EAST POINT
East Point Cycle & Key	2834 Church St. 30344
ILLINOIS	LYONS
Keen Edge Co.	8615 Ogden Ave. 60534
INDIANA	ELKHART
Parts & Sales Inc.	2101 Industrial Pkwy. . 46514
IOWA	DUBUQUE
Power Lawn & Garden Equip. . .	2551 J.F. Kennedy 52001
LOUISIANA	NEW ORLEANS
Suhen Engine Co.	8330 Earhart Blvd. 70118
MARYLAND	TAKOMA PARK
Center Supply Co.	6867 New Hampshire Ave. 20012
MASSACHUSETTS	SPRINGFIELD
Morton B. Collins Co.	300 Birnie Ave. 01107
MICHIGAN	LANSING
Lorenz Service Co.	2500 S. Pennsylvania . 48910
	MOUNT CLEMENS
Power Equipment Dist.	36463 South Gratiot . 48043
MINNESOTA	HOPKINS
Hance Distributing Inc.	420 Excelsior Ave. W. . 55343
MISSISSIPPI	BILOXI
Biloxi Sales & Service, Inc.	506 Caillavet St. 39533
MISSOURI	KANSAS CITY
Automotive Equip. Service	3117 Holmes St. 64109
	ST. JOSEPH
Ross-Frazier Supply Co.	8th and Monterey 64503
	ST. LOUIS
Henzler, Inc.	2015 Lemay Ferry Road 63125
NEW JERSEY	BELLMAWR
Lawnmower Parts Inc.	717 Creek Rd. 08030
NEW YORK	CARTHAGE
Gamble Dist., Inc.	West End Ave. 13619

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

NORTH CAROLINA	GOLDSBORO
Smith Hardware Co.	515 N. George St. 27530
	GREENSBORO
Dixie Sales Company	335 N. Green 27402
OHIO	CARROLL
Stebbe's Mid-State Mower Supply .	Box 366, 71 High St. . 43112
	CLEVELAND
Bleckrie, Inc.	7900 Lorain Ave. 44102
	WADSWORTH
National Central	687 Seville Rd. 44281
	YOUNGSTOWN
Burton Supply Co.	1301 Logan Ave. 44501
	Box 929 44501
OKLAHOMA	MUSKOGEE
Victory Motors, Inc.	605 S. Cherokee 74401
	OKLAHOMA CITY
Forest Sales Inc.	6415 N. Olie 73116
OREGON	PORTLAND
Kenton Supply Co.	8216 N. Denver Ave. . 97217
PENNSYLVANIA	CHESTER
Stull Equipment Corp.	742 W. Front St. 19013
	HARRISBURG
EECO Inc.	4021 N. 6th St. 17110
	PHILADELPHIA
Thompson Rubber Co.	5222-24 N. Fifth St. . 19120
	PITTSBURGH
Bluemont Co.	11125 Frankstown Rd. . 15235
	PUNXSUTAWNEY
Frank Roberts & Sons	R.D. 2 151
TENNESSEE	KNOXVILLE
Master Repair Service	2000 Western Ave. 37921
	MEMPHIS
American Sales & Service, Inc. .	3035-43 Bellbrook 38116
TEXAS	DALLAS
Marr Brothers, Inc.	423 E. Jefferson 75203
	FORT WORTH
Woodson Sales Corp.	1702 N. Sylvania 76111
	HOUSTON
Bullard Supply Co.	2409 Commerce St. . 77003
	SAN ANTONIO
Catto & Putty, Inc.	414 Live Oak 78298
UTAH	SALT LAKE CITY
A-1 Engine & Mower Co.	437 E. 9th St. 84111
VERMONT	BURLINGTON
Vermont Hdwe. Co. Inc.	180 Flynn Ave. 05401
VIRGINIA	RICHMOND
RBI Corp.	963 Myers St. 23260
WASHINGTON	SEATTLE
Bailey's Inc.	1414 14th Ave. 98102
WEST VIRGINIA	CHARLESTON
Young's, Inc.	233 Virginia St., E. . 25301
WISCONSIN	MARSHFIELD
Power Pac	301 E. 29th St. 54449

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.